









FORMATION OF PROFESSIONAL AND PEDAGOGICAL COMPETENCE AND DEVELOPMENT OF PROFESSIONAL SKILLS OF SPECIALISTS IN THE FIELD OF PRESCHOOL, PRIMARY, GENERAL SECONDARY AND HIGHER EDUCATION WITH INTEGRATION INTO THE EUROPEAN EDUCATIONAL SPACE

COLLECTIVE MONOGRAPH

ФОРМУВАННЯ ПРОФЕСІЙНО-ПЕДАГОГІЧНОЇ КОМПЕТЕНТНОСТІ І РОЗВИТОК ФАХОВОЇ МАЙСТЕРНОСТІ УЧАСНИКІВ ОСВІТНЬОГО ПРОЦЕСУ У СФЕРІ ДОШКІЛЬНОЇ, ПОЧАТКОВОЇ, ЗАГАЛЬНОЇ СЕРЕДНЬОЇ ТА ВИЩОЇ ОСВІТИ З ІНТЕГРАЦІЄЮ В ЄВРОПЕЙСЬКИЙ ОСВІТНІЙ ПРОСТІР

КОЛЕКТИВНА МОНОГРАФІЯ

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The collective monograph reveals the main pedagogical approaches to the formation of professional and pedagogical competence and the development of professional skills of participants in the educational process in the field of preschool, primary, general secondary and higher education with integration into the European educational space. The challenges and trends in the parity interaction of modern education, science and practice are analyzed. The methodological approaches at each level of education are substantiated, emphasizing the importance of their basic principles for ensuring continuity in the formation of the younger generation and in vocational education.

The publication is addressed to scientific and pedagogical workers, teachers, doctoral students, postgraduate students, students, employees of all levels of education and practitioners of the pedagogical field.

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Формування професійно-педагогічної компетентності і розвиток фахової майстерності учасників освітнього процесу у сфері дошкільної, початкової, загальної середньої та вищої освіти з інтеграцією в європейський освітній простір: колективна монографія / Наукова редакція: Зоя Шарлович, Тетяна Самусь, Марина Бойченко. Видавництво: MANS w Łomży, Ломжа, 2024, 395 с.

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У колективній монографії розкрито основні педагогічні підходи до формування професійнопедагогічної компетентності і розвитку фахової майстерності учасників освітнього процесу у сфері дошкільної, початкової, загальної середньої та вищої освіти з інтеграцією в європейський освітній простір. Проаналізовано виклики і тенденції паритетної взаємодії сучасної освіти, науки і практики. Обґрунтовано методологічні підходи на кожному з рівнів освіти, що підкреслює важливість їх основних принципів для забезпечення наступності у формуванні підростаючого покоління та у професійній освіті.

Видання адресоване науково-педагогічним, педагогічним працівникам, докторантам, аспірантам, студентам, працівникам всіх рівнів освіти та практикуючим спеціалістам педагогічної галузі.

Збірник укладено з підготовлених матеріалів, наданих авторами. Відповідальність за повноту і точність наведених фактів та виносок несуть автори публікації. Видавництво не несе відповідальності за надані для публікації матеріали.

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INTRODUCTION

In the context of dynamic changes in all spheres of public life, including education, new requirements are being put forward for the professional competencies of teachers of all levels, from preschool and primary to general secondary, vocational pre-secondary, vocational and higher education. At the same time, the conditions of uncertainty and challenges of our time require not only professional skills, but also cross-cutting (transversal) competencies that allow teachers to succeed both in their professional activities and in everyday life. Accordingly, the issue of finding innovative ways to improve pedagogical skills and develop professional and pedagogical competencies of educational service providers and ensuring conditions for their continuous professional development is becoming more relevant.

One of the ways of continuous professional development of teachers is the study and creative implementation of positive conceptual ideas and achievements of foreign experience in the practice of domestic educational institutions. Ukraine's European integration has opened wide opportunities for the internationalization of education and the organization of international cooperation between Ukrainian and Polish higher education institutions, primarily the development of academic mobility of academic staff to study the best achievements of Polish experience in providing quality educational services to students at different levels of the educational system.

The combination in the collective monograph of the main aspects and modern scientific and theoretical approaches to the actual problems of education and development of preschoolers; students of primary, basic and senior school education; students of institutions of professional pre-higher and higher education creates an opportunity to understand the holistic perception of the continuity of education.

In particular, the monograph raises the issues of analyzing the provision of adequate motor experience of preschool children in the modern educational process; the main pedagogical means of forming the national and linguistic personality of a preschool child; upbringing of preschool children in the conditions of the information society; methodological aspects of the introduction of lego technologies as a means of developing constructive modeling activities of preschool children; the potential of visual technologies in correctional work with preschool children with severe speech disorders; peculiarities and specifics of social development of children of senior preschool age with hearing impairment.

The authors draw attention to the methodological aspects of collective play as a means of positive social adaptation of first-graders to school conditions; models of developing creativity of primary school students in English lessons using the method of collective learning; the use of cognitive-emotional tasks and environmental games in the formation of environmentally appropriate

behavior of primary school students; formation of a healthy lifestyle of primary school students using health technologies.

Important are the analysis of the use of media literature as a subject of research and a projectforming definition in an educational research and pedagogical project; organization of
communication activities as a means of forming speech competence; technology of education of
intellectually gifted students in out-of-school education institutions; psychological well-being as a
factor in the academic performance of students of higher education institutions; dynamics of social
pedagogy development in Ukraine; development of social creativity of future social workers; the
potential of event technologies in the process of forming the corporate culture of higher education
students; professional training of future vocational teachers in the context of digitalization of
education; the use of multimedia in the training of future teachers for environmental and valeological
education of preschool children; development of emotional intelligence of future primary school
teachers; peculiarities of trust in adolescent students; implementation of a student-centered approach
in higher education; teaching of natural sciences in the system of distance education; formation of
engineering thinking in historical retrospect; theoretical and methodological aspects of the formation
of professional, pedagogical, and communicative competence at the undergraduate level and
development of professional skills of specialists in the process of postgraduate education.

The practical implementation of the integration of Polish-Ukrainian cooperation into the European educational space took place thanks to the international internship of Ukrainian research and teaching staff at the International Academy of Applied Sciences in Łomża, the results of which are also highlighted in the presented monograph on the basis of scientific approaches, analysis of scientific sources, personal observations and professional experience.

Redakcja naukowa

ВСТУП

В умовах динамічних змін в усіх сферах суспільного життя, зокрема й освітній, висуваються нові вимоги до професійних компетентностей педагогів усіх ланок від дошкільної та початкової до загальної середньої, фахової передвищої, професійно-технічної та вищої. Разом із тим, умови невизначеності та виклики сучасності вимагають від педагогів не лише професійних навичок, я й наскрізних (трансверсальних) компетентностей, що дозволяють досягти успіху як у професійній діяльності, так і в повсякденному житті. Відповідно, актуалізується питання пошуку інноваційних шляхів удосконалення педагогічної майстерності й розвитку професійно-педагогічних компетентностей провайдерів освітніх послуг та забезпечення умов для їх безперервного професійного розвитку.

Одним із шляхів безперервного професійного розвитку педагогів є вивчення і творча імплементація в практику вітчизняних закладів освіти позитивних концептуальних ідей та здобутків закордонного досвіду. Європейська інтеграція України відкрила широкі можливості для інтернаціоналізації освіти й організації міжнародної співпраці українських та польських закладів вищої освіти, насамперед розвитку академічної мобільності науково-педагогічних працівників з метою вивчення кращих надбань польського досвіду щодо надання якісних освітніх послуг здобувачам освіти на різних рівнях функціонування освітньої системи.

Поєднання в колективній монографії основних аспектів і сучасних науково-теоретичних підходів з актуальних проблем виховання і розвитку дошкільників; учнів початкової, базової і старшої шкільної освіти; студентів закладів фахової передвищої і вищої освіти створює можливість розуміння цілісного сприйняття наступності освіти.

Зокрема, в монографії піднімаються питання щодо аналізу забезпечення адекватного рухового досвіду дітей дошкільного віку в сучасному освітньому процесі; основних педагогічних засобів формування національно-мовної особистості дитини дошкільного віку; виховання дітей дошкільного віку в умовах інформаційного суспільства; методичних аспектів впровадження леготехнологій як засобу розвитку конструктивно-моделюючої діяльності дошкільників; потенціалу візуальних технологій у корекційній роботі з дітьми дошкільного віку з тяжкими порушеннями мовлення; особливостей та специфіки соціального розвитку дітей старшого дошкільного віку з порушеннями слуху.

Автори звертають увагу на методичні аспекти колективної гри як засобу позитивної соціальної адаптації першокласників до умов школи; моделі розвитку креативності учнів початкової школи на уроках англійської мови засобами методу колективного навчання; використання когнітивно-емоційних завдань та екологічних ігор у формуванні екологічно

адекватної поведінки учнів початкової школи; формування здорового способу життя учнів початкової школи засобами оздоровчих технологій.

Важливими ϵ аналіз використання медіалітератури як предмету дослідження та проектноформуючого визначення в освітньому науково-педагогічному проекті; організації комунікативної діяльності як засобу формування мовленнєвої компетентності; технології виховання інтелектуально обдарованої учнівської молоді в закладах позашкільної освіти; психологічного благополуччя як чинника навчальної успішності студентів закладів вищої освіти; динаміки розвитку соціальної педагогіки в Україні; розвитку соціальної творчості майбутніх соціальних працівників у закладах вищої освіти; потенціалу подієвих технологій у процесі формування корпоративної культури студентів вищої школи; професійної підготовки майбутніх педагогів професійного навчання в умовах діджиталізації освіти; використання мультимедійних засобів у підготовці майбутніх вихователів до екологічної та валеологічної освіти дітей дошкільного віку; розвитку емоційного інтелекту майбутніх учителів початкової школи; особливостей проявів довіри у студентів юнацького віку; реалізації студентоцентричного підходу у вищій школі; викладання природничих дисциплін в системі дистанційної освіти; формування інженерного мислення в історичній ретроспективі; теоретичних та методичних аспектів формування професійно-педагогічної, комунікативної компетентності на додипломному рівні та розвитку професійної майстерності фахівців у процесі післядипломної освіти.

Практичне утілення інтеграції польсько-української співпраці в Європейський освітній простір відбулося завдяки Міжнародному стажуванню українських науково-педагогічних працівників в Міжнародній Академії Прикладних Наук в Ломжі, результати якого також висвітлено в представленій монографії на основі наукових підходів, аналізу наукових джерел, власних спостережень і професійного досвіду.

Наукова редакція

REMOTELY TEACHING NATURAL SCIENCES: EXPERIENCE AND CHALLENGES

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1. THE LATEST TRENDS IN DISTANCE LEARNING

An important task of modern education is ensuring the content and quality of the educational process, strengthening its practical component, ensuring production and the labor market with highly qualified specialists who can solve production tasks mobile and creatively. In view of this, the functioning of new effective forms of obtaining education, capable of improving the quality of training of future specialists and contributing to the formation of their professional competence becomes relevant. In the 10th edition of the Innovating Pedagogy Report, introduced by the Open University's Institute of Educational Technology, uncovers 10 new leading pedagogical approaches, which can play a role to progress, and advance educational experiences in our increasingly hybridized world [1].

Among the highlighted practices are: dual learning, which combines academic study with practical experience to equip students with both theoretical knowledge and real-world skills; pedagogy of microcredentials, offering short, targeted learning experiences to acquire quickly specific skills or knowledge; teachers of autonomous, fostering student-centered learning environments where learners have greater control over their education. Also are noted: hybrid models, wellbeing education, and influencer led education, pedagogies of the home, teachers of discomfort, education based on the principle of walk and talk, etc. These innovative practices underscore the importance of adaptability, practicality, and personalized learning in modern education. By embracing these approaches, educators can better prepare students for success in today's dynamic and evolving world. The literary sources analysis made it possible to identify three most common modern education practices.

1.1. Dual learning.

Numerous studies have demonstrated the significant advantages of integrating classroom learning with industry experiences for students. This blended approach enables learners to grasp theoretical concepts and effectively apply them in real-world scenarios. Dual learning, as observed in

apprenticeships within both college and higher education settings, has proven particularly effective. Students consistently report gaining authentic insights and experiences through this method. By merging traditional classroom instruction with practical industry training, dual learning bridges the gap between academic theory and professional practice. It enriches classroom learning by infusing it with real-world relevance, while simultaneously imbuing workplace experiences with theoretical understanding. This synergy between theoretical knowledge and practical application not only enhances students' learning outcomes but also better equips them for success in their chosen fields.

Until recently, Ukrainian higher education primarily followed a traditional institutional model. However, with aspirations to align with European standards, Ukraine is actively exploring foreign educational practices and aims to integrate advanced ideas into its higher education curriculum. One such concept gaining traction is the integration of theoretical and practical training through a dual form of higher education.

This approach emphasizes the simultaneous development of theoretical knowledge and practical skills among future specialists of various disciplines. In pursuit of this goal, Ukraine has shifted its focus towards implementing dual education formats. To facilitate this transition, the Concept of Training Specialists Using the Dual Form of Education was developed in 2018, leading to the organization of a pilot experiment spanning from 2019 to 2023. This initiative marks a significant step towards modernizing Ukrainian higher education and aligning it with international standards.

Workplace learning is recognized as a potent method for nurturing vocational skills, fostering career development, and shaping professional identities. Dual training programs, which amalgamate education at vocational schools with hands-on learning in companies, are particularly esteemed for their efficacy in cultivating skill sets. In a recent study, Poortman C. and colleagues [2] delved into workplace learning within dual training programs within Dutch higher professional education. Through a qualitative multiple case study encompassing seven sectors, they sought to comprehend the dynamics of these learning environments and processes. The findings unveiled significant variations in learning environments both between and within sectors. However, a common observation across all cases was the minimal collaboration between educational institutions and workplaces.

While students did acquire personal and job-specific competencies essential for their daily tasks, the study revealed a dearth of substantial theoretical knowledge acquired in the workplace. Furthermore, the school's involvement in guiding workplace learning was found to be lacking. Given the substantial role workplace learning plays in dual training programs and the evolving demands placed on graduates in higher professional education to navigate complex challenges and continuously develop new knowledge as reflective practitioners, addressing these deficiencies is

imperative. Resolving these shortcomings will be crucial in ensuring the efficacy and relevance of dual training programs in preparing graduates for their professional ways.

Germany has found itself embroiled in a vigorous discourse concerning the ongoing relevance of vocational education and training, spurred by the escalating rates of participation in higher education. Traditionally, vocational education and training have played a pivotal role in facilitating the smooth transition of young individuals from the educational sphere to the labor market. However, the burgeoning number of school leavers opting for higher education over vocational education and training has cast doubt on the continued significance of professional pathways [3]. These initiatives represent a departure from the conventional dichotomy between vocational education and higher education, instead advocating for an integrated approach that combine elements of both.

In presented work, Pogatsnik M. gives the new experiences of the dual training model in engineering education in Hungary [4]. This model has been introduced recently in higher education and has become a focus of interest. This is a favorable program for the students to experience the real industry environment pri-or to graduation and it is a good tool to motivate them to study harder. The dual education students study in the institutional academic period together with the regular full-time students at their higher education institute, and parallel to their academic education they participate in the practical training. It gives the students an opportunity to join a specific training program at an enterprise. Being involved in specific "operational" practical tasks and project-oriented work enhances inde-pendent work, learning soft skills and experiencing the culture of work.

In Poland, the dual system typically spans a three-year undergraduate program, during which students not only attend lectures and classes but also gain hands-on experience through employment with reputable companies partnered with the university. The organization of such training depends on the university, but as a rule, Polish universities set a schedule - 3 days at work and 2 days at classes. Usually, at the end of 2 semesters, that is, the first year of study, the student continues the following years in the dual system. This program attracts students for another reason - students receive a reward for their work. Despite its merits, dual education in Poland faces limitations, notably its availability. This model is not universally accessible across all universities or disciplines. The relatively recent introduction of dual education in Poland, starting in 2018, has contributed to its limited popularity thus far. However, as awareness and adoption of this model grow, it holds the potential to become an increasingly sought-after option for students seeking a comprehensive and practical educational experience [5].

The experience at Harbor-UCLA emergency medicine serves as a compelling example of the effective implementation of the dual learning method in medical education. During a specific period spanning from October 2011 to September 2012, all fourth-year medical students participating in the

Harbor-UCLA emergency medicine clerkship were involved in a study comparing dual learning (DL) and standard learning (SL) approaches.

Students were divided into DL and SL groups based on the rotation month. While both groups were tasked with seeing patients presenting with 10 specific chief complaints, the SL group was instructed to study independently these cases. In contrast, the DL group participated in a structured 2-hour didactic session covering 5 of the 10 required cases. Upon completion of the clerkship, all students underwent identical pre- and post-clerkship multiple-choice knowledge tests to assess their learning outcomes. Analysis of data from 51 medical students (DL = 27; SL = 24) revealed comparable mean pre-test scores between the groups. However, the DL group exhibited a significant improvement in mean scores from 8.7 in the pre-test to 11.6 in the post-test. Conversely, there was no notable improvement in the SL group, with pre-test scores at 9.3 and post-test scores at 10.0.

This study underscores the efficacy of the dual learning method in enhancing medical education outcomes, particularly in the context of emergency medicine clerkships. The structured didactic sessions provided in the DL approach contributed to significant improvements in students' knowledge retention and application compared to traditional independent study methods [6].

1.2. Hybrid models.

Advances in technology have revolutionized perspectives on blended learning, which combines traditional face-to-face instruction with online components. The COVID-19 pandemic has accelerated the adoption of hybrid education models, aiming to optimize flexibility, accessibility, and student empowerment. Hybrid teaching, a prominent feature of these models, involves conducting lectures or seminars where some students attend in-person while others participate virtually from remote locations.

In this approach, educators utilize platforms such as Teams, Zoom, or similar tools to simultaneously engage both in-person and remote learners. This synchronous teaching method allows for real-time interaction and collaboration, bridging geographical barriers and accommodating diverse learning preferences. Additionally, hybrid events may incorporate asynchronous elements, such as online exercises and pre-recorded video materials, to complement face-to-face classroom sessions. These asynchronous components offer students the flexibility to engage with course content at their own pace, enhancing comprehension and accommodating individual schedules.

Overall, hybrid education models represent a dynamic and adaptable approach to teaching and learning, leveraging technology to create inclusive and engaging educational experiences. As institutions continue to navigate the evolving landscape of education, hybrid teaching stands as a promising strategy to meet the diverse needs of students in an increasingly digital world.

Hybrid learning is a solution to minimize the negative impact of prolonged online learning implementation, it was quite wide during the pandemic. Advantages of hybrid learning are improving various science learning outcomes, including the creation of active learning through supervision and assessment that is more valid compared to online learning and also students like it because they can interact with other students and can absorb the material well.

With the support of diverse personal and institutional mobile technologies, educators can transform both physical and virtual spaces into dynamic and motivating hybrid learning environments. However, this presents challenges for teachers tasked with designing meaningful, context-rich, and comprehensive learning experiences. Moving beyond the confines of the traditional classroom setting to embrace new hybrid learning spaces requires educators to navigate various new technologies. To address these challenges, there is a pressing need for additional teacher training and systemic interventions aimed at refining current teaching practices. Such initiatives should empower educators to venture beyond conventional teaching paradigms and recognize the pedagogical potential inherent in hybrid learning environments. Moreover, educators must leverage modern technological affordances fully, harnessing them as tools to facilitate engaging and effective learning experiences for students. By investing in teacher development and fostering a culture of innovation, educational institutions can unlock the full potential of hybrid learning to meet the evolving needs of learners in the digital age [7].

Learning style is a crucial element in the academic life of students. It plays a fundamental role in the selection of a suitable teaching method of instruction. In work, presented by Albanian researchers, the perception of the hybrid learning and students' learning styles are given [8]. In this study, the relationship between students' learning styles and their perception of hybrid learning was investigated among a sample of 89 Albanian university students. The findings shed light on the predominant learning styles among students, with visual learning being the most commonly utilized approach. Furthermore, the research revealed that students generally held a positive view of hybrid learning, though there was no significant statistical correlation observed between learning styles and perceptions of hybrid learning.

Interestingly, the field of study emerged as a significant factor influencing various aspects of hybrid learning. So, students with a kinesthetic learning style showed a particularly high regard for hybrid learning. Gender, however, was found to have no discernible impact on either learning styles or perceptions of hybrid learning. Furthermore, significant statistical differences were noted among students from different study areas regarding the purpose of using hybrid learning, suggesting varying motivations for engaging in hybrid courses across disciplines.

In summary, this study underscores the importance of considering students' learning styles and academic backgrounds when designing and implementing hybrid learning initiatives. While

hybrid learning was generally well-received among students, understanding individual preferences and contextual factors can inform the development of tailored instructional approaches to optimize learning outcomes.

1.3. Pedagogies of the home.

Globally, COVID-19 sent education from the classroom to our homes. This pedagogy seeks to understand the home as a place for cultural learning. Pedagogies of the home refer to educational practices and approaches that center around learning experiences within the home environment. This concept recognizes that learning is not confined to formal educational settings but occurs in various contexts, including the home. Pedagogies of the home encompass a wide range of activities and interactions that contribute to a person's educational development. These may include informal discussions with family members, hands-on activities, reading together, exploring nature, engaging in cultural or artistic experiences within the home environment.

The notion of pedagogies of the home emphasizes the significance of familial and domestic contexts in shaping individuals' learning trajectories. It underscores the role of parents, caregivers, and other family members as influential educators who provide valuable learning opportunities and support intellectual, social, and emotional development. In recent years, there has been growing recognition of the importance of integrating home-based learning experiences into formal educational practices. Educators and policymakers have increasingly sought to bridge the gap between home and school environments, acknowledging the complementary roles they play in fostering holistic learning experiences for individuals of all ages.

The sudden transition from predominantly in-person to fully remote instruction posed significant challenges for educators across all disciplines, particularly in the sciences, where hands-on laboratory work is often integral to learning. As higher education increasingly adopts online and blended learning formats, the need for effective resources to replace traditional laboratory classes becomes apparent.

Fortunately, remote labs have emerged as a viable solution for a wide range of subjects, including astronomy, biology, chemistry, computer networking, earth science, engineering, hydraulics, microelectronics, physics, and robotics. These platforms enable students to engage in practical scientific experimentation remotely, utilizing scientific tools, data collection equipment, models, and theories. Remote labs offer numerous advantages for both learners and educators. They facilitate practical study of science at a distance, providing students with hands-on experience and exposure to real-world scientific phenomena. Additionally, they offer flexibility in scheduling and accessibility, allowing students to conduct experiments from anywhere with an internet connection. For educators, remote labs offer opportunities to enhance curriculum delivery, supplement traditional teaching methods, and accommodate diverse learning needs.

As the education landscape continues to evolve in response to the pandemic and beyond, remote labs stand as a valuable resource for promoting active, experiential learning in the sciences and fostering a deeper understanding of scientific principles among students [9].

Science at home, science at distance – are there advantages for students? Absolutely, conducting science experiments remotely at home offers several advantages for students:

- 1. Access to specialized equipment and materials: remote laboratories provide students with access to equipment and materials that may be expensive, difficult to obtain, or hazardous to handle in a traditional laboratory setting. For example, students can work with radioactive materials or utilize advanced gene engineering techniques that may not be available at their university.
- 2. Overcoming logistical challenges: remote experimentation eliminates logistical barriers such as scheduling conflicts, limited laboratory space, or transportation constraints. Students can conduct experiments from anywhere with an internet connection, allowing for greater flexibility and convenience.
- 3. Focus on learning goals: by removing the need for physical manipulation of apparatus, remote laboratories allow students to concentrate on the underlying scientific principles and learning objectives. This shift in focus encourages deeper engagement with the material and promotes a conceptual understanding of scientific concepts.
- 4. Enhanced safety: remote experimentation minimizes the risks associated with handling hazardous materials or operating complex equipment. Students can explore scientific concepts without exposure to potential safety hazards, creating a safer learning environment.
- 5. Increased collaboration and accessibility: remote labs facilitate collaboration among students from different locations, fostering a sense of community and enabling knowledge sharing. Additionally, they enhance accessibility for students with disabilities or those facing geographical barriers, ensuring that all students have equitable access to educational resources.

Overall, remote laboratories offer an innovative and effective means of engaging students in scientific inquiry, expanding their access to resources, and fostering a deeper understanding of scientific principles. By leveraging technology to overcome traditional barriers to laboratory-based learning, remote experimentation at home holds tremendous promise for advancing science education in the digital age.

However, opportunities may not always translate into concrete achievements. In a study conducted based on national American statistical data and a quasi-experimental design have been

shown the influence of enrolling in an exclusively online degree program to students' likelihood of completing their degree [10]. The presented data reveal that students who enrol in exclusively online degree programs are less likely to complete their bachelor's degree or any degree compared to their peers who take at least some face-to-face courses. This negative relationship between exclusively online enrolment and degree completion holds true across various demographic groups, including White, Black, Hispanic, Asian, low-income, and military students.

Furthermore, the study highlights that the negative impact of exclusively online enrollment on degree completion is exacerbated for students attending for-profit 4-year institutions. This suggests that the institutional context plays a significant role in shaping students' likelihood of completing their degree when enrolled in online programs. Overall, these findings underscore the importance of considering the mode of instruction when designing and implementing online degree programs. While online education offers flexibility and accessibility, efforts must be made to address the unique challenges that students face in exclusively online settings to improve degree completion rates and ensure educational equity across diverse student populations.

Indeed, online education, especially exclusively online degree programs, has emerged as a promising strategy to increase college graduation rates. Research by Sener J. [11] has highlighted the potential of online education to cater to students who face time or location constraints. By providing learning materials and student services in a flexible online format, online education accommodates learners who cannot adhere to the rigid class schedules and office hours associated with traditional face-to-face education. The growth of online education over the past two decades is evident, with a significant proportion of college students now enrolling in online courses. This trend underscores the increasing demand for flexible and accessible educational options.

For colleges and universities, exclusively online degree programs offer several advantages. They have the potential to reduce costs by eliminating the need for physical infrastructure and associated overhead expenses. Additionally, they can enhance revenue streams by attracting students who may not have been able to enrol in traditional on-campus programs due to various constraints.

However, it is important to acknowledge that while online education presents opportunities for expanding access to higher education, it also poses challenges. These include concerns about the quality of online instruction, issues related to student engagement and retention, and the digital divide that may disproportionately affect students from underserved communities.

We have highlighted some important considerations regarding online education and home schooling. As a result, we have the following:

1. Self-directed learning skills: online courses often require students to take greater responsibility for their learning process. Students must manage their time

effectively, stay motivated, and seek assistance when needed. This reliance on self-directed learning skills.

- 2. Impact of home schooling: home schooling can offer numerous benefits, such as personalized learning experiences, flexibility in scheduling, and a supportive learning environment. However, there are also drawbacks to consider. One significant challenge is the potential loss of teacher oversight and guidance, as students may have to take greater initiative in organizing their educational process. Additionally, the lack of social interaction with peers in a traditional condition setting can influence a student's social development and communication skills.
- 3. Loss of social contacts: long-term distance learning, whether through online courses or home schooling, can lead to a reduction in social interactions and opportunities for face-to-face communication. This loss of social contacts can affect a student's emotional well-being, interpersonal skills, and sense of belonging within a community.

Addressing these challenges requires a multifaceted approach. For online education, institutions can provide support services to help students develop self-directed learning skills and foster virtual communities to facilitate social interaction among students. Similarly, for home schooling, parents can create opportunities for their children to engage in social activities outside the home, seek out resources, and support networks within the home-schooling community. Ultimately, both online education and home schooling offer unique opportunities and challenges, and it is important for educators, parents, and students to navigate these dynamics thoughtfully to ensure a positive and enriching learning experience.

2. THE IMPLEMENTATION PROBLEMS OF EDUCATIONAL COMPONENTS IN A PEDAGOGICAL HIGHER EDUCATIONAL INSTITUTION IN THE CONDITIONS OF DISTANCE LEARNING.

2.1. General strategies biochemistry teaching in a pedagogical higher educational institution.

The teachers training at the current stage of the society development requires a qualitatively new approach to the training organization in higher pedagogical educational institutions. The main requirement for modern education is not isolated knowledge from one or another discipline, but the possibility, ability and readiness of the future teacher for effective and productive professional activity through the realization of the synergy of abilities, skills and knowledge. Therefore, students aspiring to become chemistry and biology educators should cultivate both general and specialized competencies. These competencies are crucial for them to excel in their future professional

endeavours. The primary objective of teacher training is to shape individuals into specialists capable of engaging in self-education, self-development, and innovative practices. Achieving this goal necessitates the modernization and enhancement of the methodologies used in disciplines relevant to the professional training of future chemistry and biology educators.

One of the educational disciplines, the mastery of which is important for future chemistry and biology teachers, is biological chemistry. By changing teaching methods, teachers try to train specialists capable of meeting social challenges, spreading modern scientific ideas and trends in the student environment. Biochemistry is a discipline whose rapid progress definitely affects our everyday life, which actualizes the need to study it.

Formation of subject-specific competencies of future teachers of biology and chemistry in the process of professional training includes theoretical-methodical, practical and effective components. Biochemistry is included in the curricula of biology and chemistry teacher training.

This discipline is quite difficult to master, which is determined by both objective and subjective factors. Biological chemistry studies the molecular processes underlying the development and functioning of organisms, using the methods of "molecular" sciences: chemistry, physical chemistry, molecular physics, and in this aspect, biochemistry itself is a molecular science. However, the main final tasks of biochemistry lie in the field of biology: it studies the laws of biological, not chemical, form of movement of matter. This is a significant factor in the insufficient understanding of biochemical processes, which, in turn, negatively affects the learning of educational material. In addition, it should be noted that the number of hours allotted for independent study is very high: more than 50% of the program material must be mastered by students outside the classroom, which excludes the possibility of high-quality practical training by means of laboratory classes. All this creates significant difficulties in students' mastery of biological chemistry, while teachers face the problem of effective organization of the educational process, the purpose of which is to form future chemistry and biology teachers of a high level of subject knowledge.

The formation of general subject competences in biological chemistry consists in the fact that, during the educational process, students realize the importance and place of this discipline among other natural sciences. In addition, the formation of special subject competencies consists in acquiring solid and thorough knowledge of the basic topics of this subject provided by educational and work programs, as well as in mastering certain practical skills and abilities. In addition, during the study of biochemistry, students must acquire some practical experience, applying the acquired theoretical knowledge, during the conduct of biochemical research, which they will need for their future professional activities.

The laboratory training plays a crucial role in the study of biological chemistry, particularly in the laboratory of biochemistry. Its main objectives are as follows [12]:

- Illustrating lectures: the laboratory sessions serve to illustrate concepts covered in lectures by demonstrating phenomena and processes, allowing students to engage personally with the material. This hands-on experience enables them to handle biological materials and familiarize themselves with standard techniques.
- Developing laboratory skills: the laboratory sessions aim to cultivate students' manipulative skills, teaching them how to use specific apparatuses effectively. Additionally, students learn how to process data, employing statistical methods where necessary, and how to present effectively their findings, including data, results, and conclusions.

For students enrolled in biological science courses, direct exposure to and hands-on experience with biological materials are essential. Observing biological phenomena first-hand not only sparks their curiosity but also prompts them to ask questions and embark on problem-solving endeavours to elucidate these phenomena. However, students often encounter a challenge in reconciling the pristine, colourful illustrations found in textbooks with the sometimes-messy reality they encounter in a laboratory setting.

Successful biochemical research hinges upon adept utilization of equipment, spanning from precise handling of a pipette to adept operation of sophisticated instrumentation. It is crucial for students not only to master these skills but also to grasp the validity behind the numerical outputs of tools like spectrophotometry. However, proficiency in these areas comes with practice – students require opportunities to repeat procedures and learn from their errors.

While understanding the nature of biological materials and phenomena and possessing technical prowess are fundamental to scientific inquiry, students must also comprehend the process of inquiry itself. This involves identifying problems, drafting protocols, planning experiments, executing them, analysing data, and drawing conclusions. Moreover, social skills, or "soft skills," such as effective teamwork, are often indispensable in laboratory settings. Additionally, navigating the vast expanse of scientific literature is another vital skill that students must acquire.

Addressing the challenge of mastering biochemistry within a pedagogical university setting necessitates the development of tailored educational programs. These programs should align with the standards for professional competence expected of chemistry teachers in schools and should incorporate strategically planned course structures.

The results of a sociological study conducted among students of Kryvyi Rih State Pedagogical University who successfully completed the biological chemistry course highlight the need for thematic realignment in professional training. Furthermore, there is a call for the inclusion of topics in the curriculum that pertain to contemporary areas such as the biochemical foundations of healthy nutrition and the bioenergetics processes occurring in the body during physical education and sports,

among others. This ensures that the educational content remains relevant and addresses current trends and demands in the field [13].

Thus, the training of future chemistry and biology teachers in the pedagogical universities system needs real changes, both in terms of content and didactic aspects. The formation of subject competence in the discipline of biochemistry forces us to look for new teaching approaches, including the practical orientation of the course, increased training in laboratory conditions, and the use of modern teaching aids.

2.2. Practical experience implementation of remotely strategies: biochemistry "at home".

At the time of the quarantine restrictions introduction related to the spread of the COVID-19 virus, distance education was not widespread in Ukraine, especially in the field of natural sciences. During the almost three-year period of the pandemic, most of the higher education institutions of Ukraine and the world carried out painstaking work, which included not only the development of relevant various distance learning technologies but also understanding their advantages and disadvantages. With the gradual easing of COVID-19 restrictions and the potential return to traditional educational formats, many students, particularly those studying natural sciences, have resumed full-time or blended learning arrangements.

Russian military aggression became a new challenge for the participants of the educational process, made certain adjustments to the already developed online form of education, which had to be adapted to new conditions – war. One of the main challenges involved the displacement of students to other regions or even abroad, sometimes rendered synchronous class sessions infeasible.

Thus, the remote educational process organization became the main one and thereby provided the possibility of continuing the professional training of future pedagogical specialists. Remotely education is a technology based on the principles of open education, widely uses computer educational programs for various purposes and modern telecommunications for delivery of educational material and communication [14].

To facilitate the effective learning and comprehension of biochemistry, an electronic course was developed on the Moodle platform of the Kryvyi Rih State Pedagogical University. This initiative aimed to provide students with ample resources and opportunities for engagement in the learning process. The course was enriched with essential educational and methodological materials, offering various benefits to all participants involved.

Teachers contributed to the virtual learning environment by inputting text versions of lectures and accompanying multimedia presentations. Methodological recommendations for laboratory exercises, self-directed study, recommended textbooks, as well as video materials, were also integrated into the platform. One notable advantage of this online learning approach is the

accessibility it affords students, allowing them to access course content at their convenience and review it at any time, fostering a flexible learning experience for students of the Kryvyi Rih State Pedagogical University.

However, practical instrumental skills remain the biggest challenges of teaching natural sciences, and in particular, biochemistry. Such simple, at first glance, things as preparation of solutions, dosing, centrifugation, etc. are not possible without practical implementation in the laboratory.

To address these challenges, two methodological techniques were employed: "at home" independent experiments and laboratory experiments conducted by the teacher with video recording of the process. The latter approach involves virtualizing the biochemical process, allowing students to grasp key experiment stages, reagents, equipment usage, and visualizing outcomes. "At home" independent experiments aim to demonstrate chemical transformations using biological fluids through straightforward experiments. While these experiments utilize readily available household substances, they play a crucial role in developing students' research skills and fostering cognitive interest among future educators.

Experiments such as, for example, protein denaturation, conducted with everyday materials, not only aid in understanding chemical transformations but also ignite the curiosity and enthusiasm of prospective teachers. Through these innovative approaches, students gain practical experience and deepen their understanding of biochemistry, laying a solid foundation for their future teaching endeavours.

Consequences:

Modern civilizational challenges caused by pandemics, wars, and migrations require new approaches to education. The rapid development of information and communication technologies together with the globalization of society are forming new paradigms in the field of education. Classic face-to-face mentoring teaching methods are becoming rare. Combined face-to-face or distance learning forms are becoming widespread. In order to provide students with knowledge that corresponds to the modern level of science, distance forms and methods of teaching require the development of new methodological approaches and teachers' mastery of technical means of information and communication training.

To date, more than 10 new leading pedagogical approaches can play a role in advancing and improving the educational experience in our increasingly hybridized world. Some of these pedagogical techniques are rare, but some have become widespread. The most common forms of education include combined education, dual education and education "at home".

Combined learning, better known as the hybrid model, is the most common form that chains distance teaching of theoretical material with face-to-face practical work. The unconditional

advantages of this form of education include the opportunity for students to master theoretical material at any time and in any place outside the campus. The only fundamental challenge of this form of education is the ability of students to self-organize. However, no less important is the availability of technical means of communication.

Dual education attracts with the opportunity to master directly the chosen specialty in manufacturing conditions. In addition, dual education allows students to earn money at the same time as they study. The disadvantages of such training often include a low theoretical level of knowledge and a narrow focus of training.

Studying "at home" allows people to master different disciplines while being in other cities and countries. Such learning requires very strong self-organization skills from students. The biggest drawback of such pedagogical methods is the lack of practical skills. Therefore, this form of education is not very effective in relation to natural sciences.

In the implementation of distance learning for students of pedagogical universities, both methodical points and the organization of practical classes play a significant role. Presentation of theoretical material accompanied by comments and examples in video presentations allows students to master the academic basics of disciplines. Independent performance of simple experiments with a clear description of them provided by the teacher allows not only to be acquainted with the practical component of the discipline but also develops cognitive interest in students.

REFERENCES:

- 1. Future of education is identified in the OU's Innovating Pedagogy Report 2022. https://iet.open.ac.uk/innovating-pedagogy/future-of-education-is-identified-in-the-ou-innovating-pedagogy-report-2022.
- 2. <u>Poortman C.L., Reenalda M, Nijhof W.J.</u> and other. Workplace learning in dual higher professional education // Vocations and learning. 2014. Vol. 7. P. 167-190.
- 3. Hubert Ertl. Dual study programmes in Germany: blurring the boundaries between higher education and vocational training // Oxford review of Education. 2020. Vol.46 (1). p. 79-95.
- 4. Pogatsnik M. Dual Education: The Win-Win Model of Collaboration between Universities and Industry // International Journal of Engineering Pedagogy. 2018. Vol. 8(3). 145-152. https://www.learntechlib.org/p/207436/
- 5. Dual education in Poland what is it? https://entrant.eu/en/dualna-osvita-v-polshhi-shhotse-take/
- 6. Jordan J., Elder J., Uijtdehaage S., Coates W.C. Dual learning in an emergency medicine clerkship improves student performance // The journal of emergency medicine 2016. Vol.50. P. 471-476. https://doi.org/10.1016/j.jemermed.2015.07.032

- 7. Mettis K., Väljataga T. Designing learning experiences for outdoor hybrid learning spaces // British journal of educational technology. 2021. <u>Vol.52 (1)</u>. P. 498-513 https://doi.org/10.1111/bjet.13034
- 8. Ora A., Sahatcija R., Ferhataj A. Learning Styles and the Hybrid Learning: An Empirical Study about the Impact of Learning Styles on the Perception of the Hybrid Learning // Mediterranean Journal of Social Sciences. 2018. Vol. 9 (1). p. 137-148.
- 9. Learning to build back better futures for education: lessons from educational innovation during the COVID-19 pandemic. UNESCO International Bureau of Education. 2021. 319 p.
- 10. Ortagus J., Hughes R., Allchin H. The role and influence of exclusively online degree programs in higher education // American Educational Research Journal. 2024. Vol. 61(1). https://www.researchgate.net/publication/377320365
- 11. Sener J. The seven futures of American education: Improving learning and teaching in a screen-captured world. North Charleston, SC: CreateSpace. 2012.
- 12. Laboratory work in biochemical education: purpose and practice Wood E.J. Biochemical Education. 1996. Vol. 24(3). P. 132-137
- 13. Alokhina T. Practical implementation of educational components in a pedagogical higher educational institution in the conditions of distance learning // Materials of 3rd Ukrainian Scientific and Practical Conference. February 21-22. Vinnitsa. 2017. P.7-9
- 14. Lyublinska J., Dvulyat-Vyshnevska I. Teaching biological chemistry in conditions of distance education during the pandemic and martial state in Ukraine // Youth and the market. 2022. Vol.6 (204). https://doi.org/10.24919/2308-4634.2022.263965

DEVELOPMENT OF EMOTIONAL INTELLIGENCE FUTURE PRIMARY SCHOOL TEACHERS IN EDUCATIONAL ACTIVITIES: THEORETICAL ASPECTS AND PRACTICAL PRACTICES

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Abstract. The chapter is devoted to the problem of emotional intelligence as a personally and professionally significant attribute of an elementary school teacher. Emotional intelligence is the basis of the professional competencies of an elementary education specialist, defined by the Professional Standard. The level of its formation depends on the teacher's compliance with the norms of pedagogical morality, pedagogical tact and ethics, the moral and psychological climate in the classroom, the general success of students and their mental health. Therefore, the development of emotional intelligence in future primary school specialists is the primary task of institutions of higher pedagogical education.

The chapter reveals the theoretical aspects of the emotional intelligence of a person: structural components, features of the brain, mental and physiological processes that occur in the human body under the influence of emotions. It has been established that emotional intelligence has not only a mental but also a biological basis. Modern ideas about emotional intelligence, which are based on serious scientific research, make it possible to claim that it can be developed under the influence of systematic training.

Based on the results of a survey of elementary school teachers, effective practices for the development of emotional intelligence were developed and selected, which are implemented in the content of the educational activities of students of Zhytomyr Ivan Franko State University. The possibility of forming emotional intelligence skills by enriching the content of psychological-pedagogical and didactic-methodical disciplines with an emotional-intellectual component, using traditional and innovative technologies, quasi-professional and joint activities has been proven. The following proved to be effective: self-awareness and reflection exercises, emotional vocabulary development exercises, self-regulation techniques, breathing practices, stress and emotional tension relief exercises, emotion diary practice, speech technique development exercises, physical techniques, training exercises, games, dramatizations, creative tasks, use of art tools (fiction, visual arts, painting, music), art therapy techniques, mandala therapy, and others.

Key words: emotional intelligence, primary school teacher, future primary school teacher, educational activity, self-knowledge, reflection, emotion management.

The socio-economic development of any state and its international competitiveness depend on human capital. World experience proves that sustainable economic growth is achieved by those countries that make large-scale and effective investments in people, their education, intelligence, health, skills and experience. While developed European countries are increasing their own human capital, Ukraine is losing it. The reason for this is the Russian-Ukrainian war, which brought with it direct and indirect losses of human capital. These include the loss of the civilian population, forced migration, forced deportation to Russia, the destruction of infrastructure, enterprises, organizations, and a decrease in the solvency of the population. It is not only about the physical, but also the psychological safety of the individual. Constant air alarm sirens with breaks for short periods of calm, loss of a sense of power over the situation and hopelessness, a situation of uncertainty and the inability to plan one's future cause stress, anxiety, and negative emotions. The lack of peace and psychological well-being inevitably affects the state of health of Ukrainians. In the vast majority of them, there is a worsening of the psycho-emotional state, which they cannot cope with on their own and need the help of specialists.

According to a national survey conducted by the Rating Sociological Group in April 2022 on behalf of the Carnegie Endowment for International Peace (CEIP), 50% of respondents described their condition as tense or very tense; 71% indicated an average level of emotional exhaustion [21]. Thus, the question of stability and emotional intelligence as tools for preserving and strengthening the energy resources of the human body, and thus preserving the potential of the Ukrainian nation, is gaining relevance.

Therefore, the primary task of the state policy of Ukraine is to develop effective strategies for the preservation and restoration of human capital as a guarantee of stable socio-economic development. The teacher plays an important role in solving this task. Through his personality and activities, the state policy is implemented in the formation of a future person, his intellectual, spiritual, cultural and physical development. The future of the country will depend on what values, skills, and behavior he instills in the younger generation.

Effective professional training of future teachers is a decisive investment in the development of the state's human potential. The formation of a highly qualified teacher depends on the carefully thought-out and planned content of professional training and the creation of an educational environment at the stage of university studies.

Landmarks in the content of primary school teacher training are international and Ukrainian state educational documents, which define the requirements for the personality and pedagogical

activity of future specialists. They emphasize the importance of building the content of education on the basis of the competence approach, which meets the latest challenges of the time and the growing requirements of European society. The intensive informatization of society, the development of digital technologies and artificial intelligence, their entry into the educational sector, the humanization of life activities significantly affect the change in skills and abilities that a future teacher must possess in order to achieve success. The competent approach focuses attention on the development of the personality, its personal qualities and properties, moving away from the authoritarian model of communication.

Thus, in 1997, a group of experts, which included international representatives from the fields of education, health, safety and labor, within the framework of the Federal Statistical Department of Switzerland and the National Center for Educational Statistics of the USA and Canada, developed the program «DeSeCo» (full name – «Definition and selection of competences: theoretical and conceptual foundations»). In it, the concept of «competence» was understood as a combination of cognitive attitudes, practical skills, values, emotions, behavior, knowledge and skills, that is, all that can be mobilized and used for action in many spheres of life [20]

In 2006, with a further update in 2018, the European Framework of Reference for Key Competences for Lifelong Learning [3] was adopted in Brussels, which proclaims the position of the irreplaceability of competence education in the modern world. The framework provides a vision of what key competencies children and young people need to develop in order for them to achieve successful professional development, self-fulfillment and active citizenship. The list of key competencies approved in the modernized Framework includes: literacy; multilingual competence; mathematical competence and competence in science, technology and engineering; digital competence; personal, social competence and ability to learn; civic competence; entrepreneurial competence; cultural awareness and self-expression. Each of the competencies includes a list of relevant knowledge, skills and values.

The next step in the development of the competence idea in the countries of the European Union and the world was the development of the European Framework for Personal, Social and Learning Key Competence (LifeComp: The European Framework for Personal, Social and Learning to Learn Key Competence, 2020). It considers nine competencies: self-regulation, flexibility, well-being (personal sphere); empathy, communication, cooperation (social sphere); development of thinking, critical thinking, learning management (the field of «ability to learn»). Each of the competencies is revealed by descriptors. The main idea of the LifeComp Framework is that the individual competencies should be considered as «interdependent and complementary, as parts of one whole» [6], which can be taught through formal, non-formal and informal education from early childhood to adulthood.

The program «General European principles of competences and qualifications of teachers» [2] emphasizes the importance of a teacher mastering a set of relevant competences for the development of human capital as the wealth of the nation, the formation of the European worldview of the future generation and the preparation of students to perform the functions of a citizen of modern European society. The document singles out three categories of competencies that a teacher should possess: working with other people; work with knowledge, technology and information; work with society and in society.

The educational policy of Ukraine in matters of the competence-based approach to education corresponds to the trends of the educational policy of the European Union. The idea of competence training is a priority in the content of government documents: the Law of Ukraine «On Education» (2017), the Concept of Reforming the Ukrainian School «New Ukrainian School» (2016), the State Standard of Primary Education (2018), the State Standard of Basic of secondary education (2020), Standards of higher education. They have key competencies and cross-cutting skills based on European standards, taking into account national identity and national cultural and educational traditions. As the ex-Minister of Education and Science of Ukraine, L. Hrynevych, emphasized at The Education World Forum, «the Ukrainian education system has its own national face» [7].

Thus, the conceptual guidelines of the competence approach and their implementation in the content of education were reflected in both European and Ukrainian education.

The development of emotional intelligence in the future primary school teacher is an important condition for training a highly qualified and competent specialist. In domestic and foreign scientific researches, emotional intelligence is considered not only as a professional and personal quality of a teacher, the most important all-round skill (soft skills), extra-professional competence that allows you to become successful in personal and professional life, to ensure internal emotional balance, to get satisfaction from the profession, to feel feeling happy, but also as an element of other «soft» skills and competencies. Emotional intelligence is part of a number of competencies of a primary school teacher, defined by the Professional Standard for the professions «Teacher of primary classes of an institution of general secondary education», «Teacher of an institution of general secondary education», «Teacher of primary education (with a diploma of junior specialist)», such as: leadership, social, psychological, emotional-ethical, health-preserving, reflective competence, «pedagogical partnership» competence. The effectiveness of a teacher's work largely depends on his ability to manage his own emotions and feelings in the process of communication, to understand and take into account the psycho-emotional state of students and other participants in the educational process, to choose the right ways to respond to it, the readiness to critically analyze his own behavior, that is, on the level of development of emotional intelligence.

Emotions perform signaling, regulatory and communicative functions. The energy of emotions is very valuable. It directs a person's behavior, helps to develop, warns, protects, confuses, wings, stimulates to activity or, on the contrary, takes away reserves of vital forces. The variety of emotions experienced by a person fills his life moments with brightness, contributes to a full meaningful life. It has been proven that emotion is the oldest reaction of the human body, which works much faster than thought. This is an instant analysis of the situation, manifested in words, actions, gestures, facial expressions. Emotions are an important signal that informs a person about what needs to be paid attention to and mobilize one's own energy and resources of the psyche, thinking, and body, that is, it prepares a person for the appropriate reaction, the body's response to the received signal. Yes, in case of danger, there is a feeling of anxiety; when something or someone threatens and you need to fight - the emotion of anger is born; when an involuntary or deliberate mistake was made, someone was offended - a feeling of guilt arises; in case of loss we feel sadness. Emotions also inform others that we need support, help, and unification to solve a problem together.

Emotions include three components:

- subjective experiences, i.e. the same emotion is experienced differently by different people. It depends on the personality structure, age, subjective experience;
- physiological processes that occur in the vegetative nervous, endocrine, respiratory, cardiovascular and other systems of the body;
- behavioral reactions, that is, the actual expression of emotions (facial expressions, intonation, speed of speech, gestures, other expressive movements), which depends on social norms, individual psychological characteristics of the individual, his upbringing).

Emotions trigger cognitive and physiological processes and influence behavior. So, emotions direct the behavior of an individual in a certain direction, and emotional reactions, based on a person's value system, determine his actions and behavior.

However, the emotion can get out of control and turn into an emotional fire with devastating consequences both for oneself and for others, act as a factor of internal imbalance. For example, the emotion of anger can provide energy to fight. On the other hand, it can negatively affect interpersonal relationships and provoke conflicts. The emotion of anxiety helps to anticipate danger and respond wisely to it. At the same time, it can drive you into the grip of fear and limit the living space. A sense of guilt can help to notice and analyze mistakes made, take responsibility for them, and draw appropriate conclusions. But it can also be the opposite - it can lead to self-digging, relentless self-blame and immersion in the past.

The power of emotions can be so strong that there is no room for rational arguments. It is not surprising that for many centuries the view of emotions as the antipodes of the mind, which destroys it and performs a disorganizing function, dominated the Western philosophical science. Reason, the

intellect of a person was recognized as the highest virtue, while emotions were seen as reactions to a threat that were beyond control. It was believed that when experiencing strong emotions, a person loses the ability to think rationally. And only in recent decades, scientists, thanks to the achievements of modern science, came to the conclusion that emotions and intelligence are not different autonomous psychological processes. There is a close relationship and interaction between them, emotions are present in human thought and behavior. As S. Rubinstein noted, emotions are the unity of the emotional and the intellectual. With this statement, he affirms the presence of the intellectual within the emotion itself. Emotions are part of the logical spectrum, they help to understand yourself, assess the condition of your body, realize which needs are not satisfied, make a choice.

The increased interest of scientists in the problem of the unity of emotions and intelligence led to the emergence of the scientific construct «emotional intelligence». Emotional intelligence helps to correctly «read» emotions, understand them and wisely manage their energy in order to build effective communication and interaction with other people, maintain mental balance and nervous strength.

The topic of emotional intelligence began in psychological scientific developments and was actively researched and continues to be researched by foreign researchers: D. Goleman, R. Bar-On, J. Mayer, P, Selovey, D. Caruso, K. V. Petrides, E. Furnham, T. .by Bradberry, J. Greaves, R. Cooper, J. Matthews, M. Seidner, R. Roberts and others. In Ukrainian psychological science, M. Augustyuk, Y. Breus, O. Vovchenko, S. Derevyanko, V. Zarytska, E. Karpenko, N. Kovryga, O. Lyash, O. Myloslavska, M. Stasyuk are interested in the problem of emotional intelligence. M. Shpak, O. Chebykin, A. Chetveryk-Burchak and others. Regarding the development of emotional intelligence in future teachers, significant studies are presented in the works of L. Rakityanska and O. Veritova. At the same time, it should be noted that there are currently no thorough scientific studies devoted to the problem of the development of emotional intelligence in future primary school teachers in Ukrainian pedagogical science.

The «three-unit brain theory» developed in the 1960s by the American neurophysiologist P. McLean had a significant impact on the development of concepts of emotional intelligence. In a simplified and accessible form, it offered an understanding of how the human brain functions. According to it, the human brain is a three-layered organ, where each layer overlaps the previous one. In the center of the brain is the reptilian brain (reticular complex). It is responsible for the basic needs of the body (breathing, digestion, movement, coordination, heartbeat, etc.) and instincts for survival, reproduction, and defense of its territory. The reptilian brain in an emergency situation gives the human body the commands «fight», «run», «freeze», because these actions guarantee the chances of survival. That is, the reptilian brain mobilizes the energy needed for self-preservation in the event of a threat.

The reptilian brain is surrounded by the emotional brain (limbic system). It includes various brain structures such as hypothalamus, hippocampus, amygdala, thalamus, etc. The emotional brain is responsible for developing emotional reactions, processing emotions, regulating mood and emotional state, for long-term memory, cognitive functions, motivation, and also controls important biological functions, such as: smell, appetite, sleep, pleasure. The limbic system is responsible for social instincts, that is, the desire to belong to a group, to interact, to share. At the slightest sign of a potential threat, it sends an alarm signal to other parts of the brain.

The third layer - the neocortex (cortex of the large hemispheres of the brain) - is responsible for higher cognitive functions, that is, for logical and critical thinking, reflection, planning, decision-making, realization of creative abilities and self-realization of a person in general.

Information between different parts of the brain is transmitted by neural pathways. Thus, in the event of a strong emotion, for example, the emotion of fear, which forces one to run away, the prefrontal cortex – a zone of the neocortex located in the front part of the brain – intervenes in the assessment of the situation. It helps to make a more balanced and reasoned decision, to leave calmly or to ask for help. That is, it stimulates a person to make a rational decision, and not to follow the requirements of instincts. Thus, the interaction between the neocortex, and more precisely, between the limbic system and the prefrontal cortex, plays a key role in maintaining emotional balance.

Another prerequisite for conducting systematic studies of emotional intelligence was the theory of «multiple intelligences» by Harvard University professor G. Gardner, which forced scientists to look at the nature of intelligence in a different way. He considered the idea that a person is born with a rich intellectual potential that can be developed throughout life. As a result, she begins to dominate not all, but only certain types of intelligence. The scientist described nine types of intelligence: bodily-kinesthetic, visual-spatial, logical-mathematical, musical, linguistic, existential, naturalistic, interpersonal, intrapersonal. And emotional intelligence was not mentioned among the proposed types, but the last two types were considered as its forms.

There are a significant number of interpretations of emotional intelligence, which are roughly similar in essence, but differ in certain features and structural model. The basic definition is as follows: emotional intelligence is a set of skills and abilities of an individual to recognize and understand their own and other people's emotions, to take them into account in communication, as well as the ability to control and manage one's emotions and the emotions of others in order to solve practical tasks.

Science knows several models of emotional intelligence with varying degrees of detail. The model proposed by the American journalist and psychologist D. Goleman in the 90s of the last century is considered the most practical. It includes five components:

- 1) Self-awareness the ability to identify one's emotions, one's motivation when making decisions, to learn one's weaknesses and strengths, to determine one's own goals and life values.
- 2) Self-regulation the ability to exercise control over one's own emotions, restrain emotional impulses.
- 3) Motivation the ability to strive to achieve a goal not for the sake of external incentives, but for the very fact of its achievement.
- 4) Empathy the ability to take into account the emotional state of other people when making decisions, as well as the ability to empathize with others.
- 5) Social skills the ability to build harmonious relationships with other people, to direct them in the desired direction.

The following indicators are indicators of a person's emotional intelligence:

- Is aware of his emotions, understands the reasons for their occurrence, is able to describe them verbally.
 - Listens carefully to others.
 - Open, interested and respectful of people's opinions that do not coincide with his own.
 - Recognizes emotions, feelings, moods, emotional states of other people.
 - Reacts by suspecting dissatisfaction and unexpressed emotions of other people.
 - Understands possible reactions to one's own behavior, actions, judgments.
- Follows up when what was said was misunderstood or a confrontational path was chosen.
 - Notices when another person is uncomfortable and shows his understanding.
 - Identifies and responds to tensions between team members.
 - Offers help and support to others.
 - Open to new norms, values, cultures, rules and acts accordingly.

Insufficient development of emotional intelligence leads to a number of problems in the personal and professional spheres. First of all, a person experiences difficulties in communication at work and at home, there is a constant feeling of complete misunderstanding by others, irritation, long-lasting negative emotions, and chronic fatigue. These are clear threatening symptoms that indicate psychological problems. If these signs appear together, it becomes a reason to wonder if the reason lies in a low level of emotional intelligence.

For a primary school teacher, a high level of emotional intelligence development is a sign of his professionalism, a necessary condition for pedagogical activity. This is necessary both for the teacher himself and the preservation of his mental health, and for his students, their parents and colleagues. The pedagogical work of a primary education teacher is accompanied by constant emotional tension and stressful situations. There are many reasons for this: high requirements for the

profession, excessive emotionality of younger schoolchildren, intense intellectual work, intensive communication, high responsibility for life, health, quality indicators of student learning, lack of time, individual and personal characteristics of the teacher and many others. All of them reduce the resourcefulness of the teacher, cause him intense emotional fluctuations, feelings of devastation, fatigue, depression, helplessness. As a result, a negative perception of the world arises: everything around is annoying, everyone is bad, there is no positive. Of course, such thoughts and the psychoemotional state of the teacher affect primarily those people who are in his immediate environment and with whom he contacts in the process of pedagogical activity. His students are among the first to suffer. Incontinence, emotional outbursts, insults to children, aggressive reactions, indifference towards students are often the consequences of the internal imbalance of teachers. The teacher becomes excessively picky about the students and himself. If we take into account the fact that, due to their age characteristics, younger schoolchildren are extremely sensitive to the emotional state of their teacher, who is a reference person for them, we must admit that this behavior of the teacher provokes school stress in children and their general failure. A teacher's emotional intelligence indirectly affects the cognitive activity and psycho-emotional states of schoolchildren.

T. Stas believes that «on the ability to feel and take into account the mood of others, to determine and correctly assess the emotional state of the individual depends on the emotional comfort of both the student and the teacher, as well as the psychological climate in the training group, and therefore, the effectiveness educational process» [19, p. 7].

E. Nosenko and R. Trulyaev in their monograph, based on the statement of O. Prokhorov, point out that «frequent negatively colored states of the teacher reduce the effectiveness of teaching and education, increase conflict in relationships with the class and with colleagues, contribute to the emergence and consolidation in the character structure and professional qualities of negative traits, destroy health» [11, p. 17].

The phenomenon of emotional intelligence is closely related to issues of pedagogical communication, tact and ethics. In an excited emotional state, the teacher often resorts to shouting. By the way, the cry is a testimony of the teacher's powerlessness rather than his strength. Scientists and practicing teachers point to the importance of the ability to control one's voice and intonate speech. Given the special sensitivity of younger students to praise, using it can have a much better effect on students than raising your voice. Under the influence of strong emotions, the teacher is able to show excessive directness, show his superiority over the students, make tactless remarks, which leads to consequences opposite to those they expected. In the absence of self-control and self-regulation skills as components of emotional intelligence, there is a violation of pedagogical tact, a decrease in the student's self-esteem, a loss of faith in his own abilities, disobedience, copying of the teacher's behavior by younger schoolchildren, and a manifestation of rudeness and aggression

towards his classmates. An elementary school teacher must demonstrate to his students an example of correct emotional and ethical behavior.

Therefore, the professional duty of a teacher is to act within the ethical norms of pedagogical activity, that is, to focus on universal human and pedagogical values and norms in one's own emotional manifestations. In his activity, adhering to the ethical principles of pedagogical activity, the teacher must maintain self-control and endurance, avoid negative emotional reactions that degrade human dignity and offend the younger student. Addressing the emotional sphere of his students, he should arouse positive emotions in them, encourage learning, inspire creativity, and be ready to empathize. The teacher must create an emotionally favorable atmosphere for learning.

Psychologists believe that teachers with a low level of emotional intelligence try to reject their own emotions, especially negative ones, suppress and block them, hoping that everything will pass. However, this only aggravates the situation. The body begins to suffer from unrealized and unspoken emotions. Gradually accumulating, they can lead to even greater psychological and physiological problems. The body begins to ache.

One of the medical studies conducted in Ukraine as part of the ELSPAC (European Longitudinal Childhood) international program studied the impact of aggression on the health of adolescents. 864 teenagers were involved in it. As a result of the research, it was found that teenagers with aggressive behavior experience stomach pains more often than others. It turned out that «aggression is very closely related to the contraction function of muscle cells. During an aggressive state, a reflex spasm and tension occurs, the secretion of hormones (adrenaline, norepinephrine) and hydrochloric acid increases. The consequences of such a reaction are pain syndrome and a wide range of gastrointestinal disorders» [4]. Among the diseases are gastritis, stomach ulcer, duodenitis. So, the state of the gastrointestinal tract is directly related to the emotions and psycho-emotional state of a person.

This research once again proves that emotions have a cellular basis. Under their influence, the body strongly secretes hormones that accelerate the heart rate and bring the muscular system into a tense state. When a person experiences an emotion, there are necessarily changes in his physiological processes, and primarily in hormonal ones. Hormones are produced by nerve cells of the brain and spinal cord. During positive emotional experiences, the level of the hormones dopamine, serotonin, endorphin and oxytocin, which are conventionally called the hormones of happiness, increases.

Dopamine is a neurotransmitter and at the same time a hormone called the hormone of pleasure and love. It begins to be produced in the process of waiting for future satisfaction and directly affects a person's well-being and the level of his vital energy. Dopamine helps maintain a good mood and positive emotions, enhances motivation, affects memory and concentration, cognitive processes,

and generally affects many other neurological, cognitive, and behavioral functions in the body. Its balanced level gives a feeling of pleasure, lightness and euphoria.

Serotonin is responsible for feelings of confidence and peace. It affects the work of muscles, endocrine and cardiovascular systems, is synthesized in the tissues of the digestive tract, central nervous system and platelets. A lack of serotonin in the body causes a bad mood and significantly affects the quality and duration of sleep. A decrease in its level is the cause of bad mood, depressive states, increased anxiety, aggressive behavior and even Alzheimer's disease. Most antidepressant drugs are aimed at increasing serotonin levels. When a person experiences happy moments, its amount in the body increases.

As a result of the activation of endorphins, a feeling of joy, lightness and cheerfulness appears. Psychologists claim that it is this hormone that causes euphoria, which resembles the effect of opiates. This is due to the fact that the formula of endorphin is similar to that of morphine. Like any narcotic drugs, they can suppress pain. Their function includes the normalization of emotional states, breathing rate and blood pressure. The greatest amount of endorphins is produced when laughing, experiencing positive emotions, in love and when achieving success. While guilt, on the contrary, contributes to the reduction of their emissions. It is endorphins that make a person energetic, purposeful and happy.

Another hormone that belongs to the group of hormones of happiness is oxytocin, which is synthesized in the hypothalamus. It is responsible for reducing the feeling of fear and anxiety, increases the level of trust, and gives a feeling of peace. It is called the hormone of love, affection and parenthood, which proves its importance in social interaction. Under the influence of this hormone, people demonstrate a higher level of empathy, their ability to feel and understand other people's emotions is modulated. It promotes the opening of «emotional channels» in communication not only with relatives, but also with colleagues, friends, and people around.

In recent years, researchers in the field of medicine and neuroscience are trying to find the use of oxytocin in the therapy of people with autism spectrum disorders who experience difficulties in interacting with other people and understanding their expressive facial expressions. As the research shows [18], an increase in the level of oxytocin in the body of autistic people allows them to maintain visual contact with others for a longer time, which is usually accompanied by significant discomfort for them.

Negative emotions associated with danger and personally threatening conditions cause increased secretion of cortisol, catecholamine hormones (adrenaline and noradrenaline), sex and other hormones.

Cortisol is called the hormone of fear, because it is produced when a person feels fear and is under the influence of stressful factors. Actively produced by the adrenal glands in large quantities during stress, it can destroy healthy muscles and bones, slow down the healing and regeneration

processes of cells, impair digestion, metabolism, mental abilities, and weaken the immune system. With acute stress, the cortisol level soon returns to normal, and this is a natural effect of the body. But when a person is in a state of excessive stress for a long time, experiences frequent stresses with a pathological reaction to them, this leads to malfunctions of all systems of the human body. As a result of frequent stress, cortisol accelerates the body's aging process due to the fact that the action of other hormones is inhibited and it does not have enough time to recover.

The hormones adrenaline and norepinephrine are not directly related to fear. They begin to be produced when a person experiences stress associated with pleasure. At the same time, breathing becomes more frequent to supply the muscles with oxygen, blood vessels narrow to redirect blood to the heart, lungs, and other muscles, and the nervous system is stimulated. There is an excessive release of emotions. It causes an increase in energy and productivity, increases awareness in times of stress. Usually, adrenaline is actively released only for the first five minutes, but its effect in the body continues long after the danger has passed. If the body is often exposed to adrenaline, it can lead to disorders of the cardiovascular system, hypertension, heart attacks, strokes, etc.

Therefore, in order to limit the harmful impact of negative emotions on one's own psyche, it is important for a primary school teacher, as a representative of an emotogenic profession, to learn how to properly release them without harming other people.

Innovative views on the nature of emotional intelligence were expressed by D. Goleman in the book «Focus. About attention, inattention and success in life» [5]. He points to the connection of emotional intelligence with the phenomenon of attention and claims that it is based on three types of focus of attention:

- internal focus (self-awareness) helps to cooperate with one's own intuition and value system;
 - focus directed at other people (empathy) polishes our connections with people around us;
- external focus helps to adapt to the influence of large systems within which our life activities take place, and to understand interdependence.

Attention, concentration form the basis of self-awareness, help to understand emotional triggers, monitor the internal emotional state and bodily sensations, analyze thoughts, interpret other people's emotions, and interact with them. If you focus your attention on mistakes, emotions of anxiety, guilt, and depression are activated. Positive emotions expand the focus of attention and change the perception of people and the surrounding world. Therefore, a person can influence emotional reactions and behavior. To do this, you need to change your own thinking from negative to positive and get rid of negative beliefs. Experts in the field of cognitive neurobiology Michael Posner and Mary Rothbart emphasize that «attention ensures the operation of the mechanisms that

underlie the processes of awareness of the external world and the ability to control one's thoughts and feelings by one's own will» [16].

The idea of a triple focus of attention was embodied in the main principles of the concept of socio-emotional and ethical education, which is widely practiced and popularized throughout the world and in Ukraine in particular. The triad of dimensions «awareness, empathy, involvement» is considered at three levels: personal, social and systemic. This approach contributes to the development of systemic thinking, the peculiarity of which is the ability to see not parts, but the whole, to perceive specific objects and events not in isolation and statically, but in their interrelationship and dynamics. P. Senge, the developer of the theory of systems thinking and the concept of the «learning organization», believes that systems thinking helps to analyze and make informed decisions, assessing possible risks and patterns. Interdependence is the basic law of nature and human life. Interaction between people, teamwork brings the desired results much faster than when people work autonomously. At the same time, the need for social interaction raises the importance of such issues as the importance of dialogue and communication, the connection between one's own behavior and the behavior of other people. The course of socio-emotional and ethical education considers systems thinking as «the understanding that people, things and events are interdependent with other people, things and events and are interconnected with them by a complex network of cause-and-effect relationships» [17, p. 11.]. Therefore, the problem of system thinking helps to understand how objects and events that, at first glance, seem distant, affect a person's wellbeing, sense of happiness and well-being, and how his behavior is reflected on others. Therefore, a person's inner peace, happiness and well-being directly depend on the system of values, emotional reactions, actions and behavior of other people.

In order to achieve productivity at the workplace and build constructive pedagogical interaction in the educational environment, as well as to avoid professional burnout and deformation, the teacher must take care of the development of his own emotional sphere and emotional-intellectual skills, look for new ways for self-improvement and self-realization. If emotional intelligence is not formed during university studies, the graduate is unprepared for the emotional aspects of school life, and therefore, not protected against the possible challenges of the primary school teacher profession. Therefore, one of the main tasks of professional training of future primary school teachers is the development of their emotional intelligence.

In order to develop an experimental model of the development of emotional intelligence in students of higher education who aspire to become a primary school teacher, we conducted a survey among practicing teachers of the first degree of a general secondary education institution. The survey covered 110 primary school teachers and educators of the extended day group. Their age ranges from 20 to 67 years. The questionnaire developed by us in Google Forms served as the material for the

survey. It was aimed at revealing the level of respondents' awareness of the topic of emotions and their knowledge of the features of the emotional sphere; find out what content teachers put into the concept of «emotional intelligence»; what are its structural components; to what extent they have developed emotional intelligence skills and what technologies they use to develop emotional intelligence in their pupils. The survey helped us to obtain meaningful information, which, as a result of analysis and interpretation, allowed us to single out the main shortcomings in the development of the emotional intelligence of practicing teachers, on the warning and prevention of which during the student period, our further work will be directed. We included:

- insufficient awareness of emotions, determinants of their occurrence, features of manifestation, connection of emotions with the body and their impact on mental and physical health and interpersonal relationships;
- poor emotional lexicon, which makes it difficult to recognize, describe and realize emotions and feelings;
- insufficiently developed ability for self-knowledge, the ability to understand the difference between «I feel» and «I think», which allows to understand and interpret emotions;
- unformed self-control skills, which limits timely understanding of the appearance of an emotion, determination of its root cause, and awareness of how relevant this emotion is to a specific situation;
 - insufficient reflection of emotions;
 - high level of emotional response;
 - unclear and blurred ideas about emotional intelligence and its structural components;
 - insufficiently developed expressive and artistic skills;
 - ignorance of alternative ways of receiving and expressing one's emotions;
- lack of ability to determine the psycho-emotional state of one's students, colleagues, other people based on expressive signs and behavior;
- lack of knowledge of methods and techniques for relieving emotional tension, stabilizing the emotional state, techniques for overcoming stress.

However, most often teachers experience difficulties with managing their own emotions and self-motivation. They do not always manage to restrain negative emotions and direct them in a constructive direction, as well as inspire positive emotions. It is not easy to restore the lost balance after experiencing an emotionally aggravated or stressful situation and to motivate oneself for active and productive activities.

The analysis of educational and professional programs, curricula, according to which students of the bachelor's and master's levels of higher education, specialty 013 Primary education at Ivan Franko State University of Zhytomyr study, showed that the development of emotional intelligence

in future primary school teachers is not given enough attention. This is mainly facilitated by mandatory and optional educational components, which integrate the topic of emotions and emotional intelligence; different types of pedagogical practices; participation in scientific and research work, completion of course and diploma theses. A separate course of emotional and intellectual orientation in the content of educational and professional programs was not found.

A successful solution to the problem outlined by us is possible with a comprehensive approach, which involves: integration of elements of emotional-intellectual learning into the content of educational disciplines; selection of practically oriented forms and methods of emotional intelligence development; introduction of educational discipline on the topic of emotional intelligence of future primary school teachers; creation of an innovative educational environment; organization of pedagogical practice with a focus on the emotional component.

Theoretical knowledge about emotions, their types, the mechanism of their occurrence, properties of the nervous system, basic knowledge of neurobiology regarding the work of the brain, its ability to process emotional information, and management of emotions are of great importance in the development of emotional intelligence of future primary school specialists. Therefore, when developing content support for the process of developing emotional intelligence, the educational components of the cycle of professional and practical training should be supplemented with information related to the emotional sphere and emotional intelligence. Students need to learn the basic concepts of the science of emotions, get acquainted with theoretical concepts and theories of emotions and intelligence, with the main regularities of emotional processes, concepts of emotional intelligence, features of the regulation of the emotional sphere of the individual, consider the role of will and intelligence in the processes of regulation of emotions. It is necessary to develop the desire of student youth to study the emotional sphere of both their own and other people, supporting interest in self-knowledge.

To the mandatory educational disciplines of the psychological-pedagogical cycle, which can be filled with knowledge about emotions, emotional intelligence and which are studied by future primary school teachers, we included: «Introduction to the specialty», «Pedagogy», «Psychology», «Age and pedagogical psychology», «Theory and methods of education in primary school», «Didactics and organization of the educational process in primary school», «Pedagogical skills of primary school teachers».

Already from the first practical classes, students feel the need to develop the skills of effective presentation in front of an audience. Fear of the audience is one of the most common phenomena that occurs among students. This is especially true for those who at least once in their life faced a negative experience and doubted themselves. Fear, feelings of panic are caused by anxiety and excitement before the upcoming speech and are familiar to every speaker. Their presence is evidenced by the

following signs: voice tremors, facial redness, continuous gesticulation, disturbances in the volume and pace of speech, unhealthy nervous excitement, etc. Fear of the audience blocks the logical presentation of thoughts and turns a public speech into an execution for the speaker.

In order to overcome the fear of public communication, students learn how to build an effective performance or speech and what main aspects to pay attention to during preparation, how to emotionally attract the attention of the audience, collectively compile a set of practical tips for combating fear, make a selection of books, video courses, webinars on public speaking the art and skill of self-presentation. The main work is aimed at mastering and managing one's emotions during public speaking.

Special attention is paid to getting to know the techniques and methods of removing emotional tension and stabilizing the emotional state. The main principle of their action is self-regulation of emotions and one's own psycho-emotional state, relaxation, which reduces attacks of fear, panic, anxiety, and gives a sense of peace. To calm down and control yourself in an emotionally tense situation, you need to restore full, calm and rhythmic breathing. Such breathing activates the parasympathetic nervous system, fills the blood with oxygen. Physiologists claim that inhalation causes excitation of the nervous system, exhalation - on the contrary, its inhibition. Breathing with shortened inhalation and prolonged exhalation has a calming effect. Breathing with prolonged inhalation and a shortened exhalation mobilizes the functions of the nervous system, invigorates and helps to tune in to work. In case of stress, it is recommended to combine breathing with leisurely walking, which gives it a rhythm and promotes relaxation.

Breathing is the simplest and most natural way of relaxation, which is the basis of traditional Chinese meditation, Buddhist practices, Indian yoga, and massage. This is a process that affects the emotional and physical state of a person. With its help, you can take stress and anxiety under control, calm down, and improve your general well-being.

By the way, the results of research conducted in 2010 under the leadership of neurobiologists Yi-Yuan Tang and Michael Posner [23] proved that regular practice of Chinese meditation, built on a combination of physical exercises and conscious breathing, leads to positive changes in the structure of the white matter of the brain. This is manifested in a decrease in the level of the stress hormone cortisol and an increase in the hormone melatonin, which is responsible for calmness and helps sleep. As a result - improved mood, improved attention, lower levels of anxiety, anger and fatigue. The conclusions reached by scientists are that the daily performance of breathing practices, especially during intensive brain development in childhood and during active mental activity in student age, has a positive effect on emotional and cognitive development and is a prevention of depression, dementia, schizophrenia and other mental disorders.

During classes, students practice relaxation exercises, breathing exercises, conscious breathing practices, self-regulation techniques, physical exercises, facial gymnastics, self-massage to relax facial muscle spasms, and exercises to relieve stress and emotional tension. Examples of breathing exercises are: deep breathing; diaphragmatic or abdominal breathing; breathing exercises with numbers; square breathing; alternate nostril breathing; invigorating breathing; breathing «Balance» and many others. Their daily implementation helps to control negative emotions, reduce anxiety and improve attention. During breathing practices, students come up with fun and funny names for them, turning them into breathing games. Thus, the exercise «Alternate Nostril Breathing» was named «Rhino»: we imagine ourselves as a rhinoceros, which alternately breathes through one nostril. The exercise «Deep breathing» was renamed «Flowers»: we inhale the fragrant smell of flowers; inhale deeply through the nose, saying: «Wonderful! What a wonderful aroma!». The breathing exercise using the diaphragm reminded its performers of a balloon in the stomach, so it received a new name «Ball»: exhalation - the balloon inflates, the stomach protrudes; exhalation - the ball deflates with the sound «s-s-s-s».

Breathing is always connected with awareness. Awareness shifts attention from one's own thoughts and feelings to the level of physical sensations in one's body. Human consciousness follows movement, depth and intensity of breathing, stops in certain organs, scans the body, examines bodily sensations. Gradually, the mind moves from concentration on breathing to the awakening of thoughts, dreams, projects, and creative potential.

During classes, students get acquainted with a set of illustrated «breathing cards» for the stabilization of psycho-emotional states, developed by the Ukrainian psychologist S. Roiz [15]. They are intended for ages three and up to any age. The essence of their use is that during breathing you need to circle the contours of the picture with colored arrows: green color - inhalation, blue - exhalation. When the technique is mastered, the borders of the image can be circled with a glance. After consolidating skills, it is recommended to transfer actions to external objects: buildings, windows, doors, trees.

In the work of a Ukrainian primary school teacher who lives in difficult wartime, breathing practices should always be in the «psychological self-help first aid kit». 15-minute daily classes consolidate the habit of conscious breathing, increase stress resistance.

Public speaking is always tension and physical stiffness of the facial muscles. To relax them and relieve hypertension, future teachers master facial gymnastics and learn to self-massage the face and neck. Pressing on special points on the face, neck, back of the head, other parts of the body, kneading and rubbing them leads to muscle tone, improves blood supply, concentrates attention, returning a person to normal form.

Emotions and the body are inextricably linked. They not only affect the mind, but also the physical condition of a person. Each emotion causes certain sensations in the body: tingling, numbness, stiffness, heaviness, pressure, clamps, elation, lightness, euphoria, etc. The following technique will help students better understand bodily sensations during emotional outbursts and clarify the causes of psychosomatic diseases. To begin with, you need to make a list of emotions. Next, it is suggested to draw a human figure and choose an emotion from the list. The next step is to experience the chosen emotion and observe your bodily sensations. If this fails, we move on to the second option: recall the situation, the event in which this emotion was present, and mentally relive it. We follow the physical changes in the body and mark with color on the picture of a person, in which parts of the body we feel them. By the way, Finnish scientists (Aalto University, Helsinki) came to the conclusion that people feel emotions in certain parts of the body and developed a heat map of emotions based on the results of experimental research. It has a total of 15 emotions: anger, fear, disgust, happiness, sadness, surprise, indifference, anxiety, worry, love, depression, contempt, pride, shame, envy. They are marked with cool and warm colors depending on the modality. So, for example, with the emotion of happiness, heat is evenly distributed throughout the body, and when a person feels anger, thermal activity is concentrated precisely in the area of the head and in the upper part of the chest, that is, there are changes in breathing and heartbeat. At the end of the technique, it is suggested to write a letter to your body. For example, «Hello, my body! Natalia is writing to you. I want to tell you that...».

In order for a public speech to have an appropriate impact on the audience, students of higher education learn not only to identify their own emotions, but also to establish emotional contact with the audience. This skill is very important in the future teaching profession. Without it, the goal of the performance will not be achieved. In order for the performance to be successful, you need to tune in to the desired emotions and immerse the audience in this emotional state. After the speech, there is a self-analysis of the speaker's psycho-emotional state and a collective discussion. Emphasis is placed on the analysis of the ability to manage one's own emotions, constructively perceive criticism, argue and deny, influence the emotions of the interlocutor.

The development of emotional intelligence begins with self-knowledge. Self-knowledge as a structural component of emotional intelligence is the process of studying and understanding oneself, one's thoughts, feelings and behavior. It directs a person's attention to the inner world, to his own «I». T. Kyrylenko calls it «emotional self-knowledge» [9], which specifies its functions in the emotional sphere and reduces them to recognition of feelings and emotions, identification of emotional state and mood. Emotional self-awareness helps a person to focus on the causes of emotions and find a way to overcome them. Emotional self-awareness can be deepened with the help of self-reflection. The concept of «reflection» in translation from English means «to reflect, reason, ponder». In psychology,

reflection is interpreted as self-observation, self-analysis of oneself, one's activities, means of achieving the desired results, self-evaluation, the process of deepening one's self. These are reflections on oneself, one's actions, emotions, a deep analysis of internal emotional experiences, a critical understanding of one's own thoughts, behavior in the context of the existing situation, with the aim of improving the result in a similar situation in the future. That is, reflection helps to adjust one's actions and behavior in the future. According to N. Gutkina, reflection is «a research act directed by a person to himself as a subject of life activity» [8]. V. Palamarchuk [13]. considers reflection as «a component of intellectual activity and an integral part of the intellectual culture» of an individual.

A prerequisite for the beginning of reflective processes is a problem situation that triggers thinking activity. Self-reflection helps to identify and understand emotions and their influence on thoughts and actions. It allows you to learn from your mistakes, use the experience of other people. Thanks to it, self-esteem, emotional and valuable attitude towards oneself is formed. It suggests ways to solve complex problems, stimulates personal growth and self-improvement. Self-understanding, the ability to analyze one's own emotions, thoughts, and experiences helps to understand one's needs and desires, to establish a connection between events and emotions, to focus on one's strengths and to change one's way of thinking, and therefore to develop new and effective behavioral strategies. Self-reflection will be effective if you take a neutral, unbiased position when introspecting thoughts and feelings.

The importance of reflection in the pedagogical activity of primary school teachers is enhanced by the fact that it becomes a source not only of knowledge about oneself, but also of the inner world of schoolchildren and other people. It «allows to regulate one's own activity and behavior on the basis of self-research, and at the same time, by delving into the analysis of the behavior and thinking of students, to manage their activities» [14]. In order to overcome difficulties and mistakes related to the emotional sphere, so that emotional tension does not exhaust and lead to emotional burnout, in order to successfully interact with other participants in the educational process, the teacher must know his individual psychological characteristics and adequately assess his own capabilities. And self-knowledge helps him in this.

In the process of students' educational activities, considerable attention is paid to the development of self-awareness, activation of the processes of self-knowledge and reflection. In order to avoid spontaneity in the work on the development of the emotional intelligence of future teachers of primary education, in the process of studying the educational disciplines «Introduction to the specialty», «Pedagogy», «Pedagogical skill of the primary school teacher» self-discovery exercises are systematically practiced, role-playing and business games are used, and an evaluation is organized students' activities. For example, students are encouraged to ask themselves, «What emotion am I feeling right now?», name that emotion out loud (eg, «I'm feeling sad today»), and focus on those

feelings. It is worth starting with the simplest emotions: joy, sadness, anger, fear, surprise, curiosity. Next, the acquirers determine what exactly caused the emotional reaction: a situation, an event, people, a word, a memory, etc.; what is the intensity of the emotion on a 10-point scale (1 – the weakest degree of intensity, when the emotion is easy to control; 10 – the highest intensity of the emotion, when it is like fire). After closing the eyes, the emotion can be visualized, gradually reducing its degree of intensity from a higher indicator to a lower one.

Another exercise: make a list of emotions felt during the day; find a negative emotion among them and analyze the reason that caused the emotion.

The practice of keeping an emotion diary will help you track your emotions and feelings for the day and record them. Thanks to it, students learn to really see their own emotional state, to realize what emotions are driving them at a specific moment. This helps to prevent the development of a crisis at the beginning of its occurrence. But the main task of the diary of emotions is to help carry out introspection. It is better to do it in the form of a table:

Date	Event / situation	Emotions	Thoughts	Behavior	Result

In the «Event / situation» column, you need to briefly describe the event (communication situation, object, phrase, etc.) that caused the emotion to arise.

In the «Emotions» column, you should indicate the emotion that appeared. Note that the reaction to an emotional trigger in the vast majority is not one emotion, but a whole range of emotions. Therefore, it is necessary to list them.

In the «Thoughts» column, you need to write down what thoughts you have in an emotional context. For example: «I am not respected and my opinion is not listened to. It's not fair!».

In the «Behavior» column, it is worth noting your actions in the context of the situation that caused the emotion.

In the «Result» column, it is worth drawing conclusions: Are you satisfied with yourself? How could it be done differently? What consequences did your emotional reaction lead to? What lesson did you learn for yourself? What will you do next time?

Thus, with the help of a diary of emotions, students make active self-observation of their «I» every day, re-live and become aware of their own emotions, reflecting on the reason for their appearance and working out emotional triggers. This technique makes it possible to detect hyperbolized emotions, thoughts and actions, to understand whether the situation was worth the spent energy. As a result of the analysis, future primary school teachers learn to see their own mistakes, develop the ability to react to certain situations in a new way, learn to release emotions without

suppressing, blocking or preserving them in themselves, which makes it possible to grow professionally and live a happy life.

Knowing and identifying emotions is the first step on the way to their regulation. «It is easier for a person to manage his emotions if he is aware of how he usually reacts to them» [1, p. 123.].

In our practice, we often have to observe that students of higher education find it difficult to find words to describe and characterize their inner emotional feelings. Therefore, the emotional lexicon is important for the development of emotional intelligence. In order to enrich the vocabulary of future elementary school specialists with the names of emotions and emotional states, a number of tasks that are to the liking of students are offered in lectures and practical classes. Examples of such tasks:

- write the names of emotions and feelings on the first letters of your name;
- write down one emotion name for each letter of the alphabet;
- make a list of emotions for some letter, for example, for the letter «H»;
- print a list of emotions (you can take it from the Internet) and choose the emotions you feel now / when you watch a movie / contemplate nature;
- combine emotions into two groups: comfortable and uncomfortable for the surrounding people;
 - name the emotion by the emoticon;
- work in pairs: show and name a certain emotional state (one of the pair must portray the emotion on the face that the teacher says in his ear, the other must name the emotion based on the facial expression of his friend);
- use facial expression to create a mask of a certain emotion and «wear» it to your friend, i.e. «sculpt» his facial expression, body posture with your hands;
 - games «Shop of Emotions», «Theatre of Emotions».

Educational disciplines «Children's literature with the basics of culture and speech technique», «Methodology of language and literature education (Ukrainian language and literature)», «Methodology of art education», «Expressive reading» have a significant potential for expanding the emotional vocabulary of students. literary works, while perceiving works of music and fine art, students pay attention to the emotions and feelings of the characters, analyze their mental experiences, reveal their psychological state, penetrate their consciousness. Of course, at the same time, the students' own vocabulary is enriched and expanded by the emotional and emotive vocabulary of the works, the vocabulary of names of emotions and feelings is clarified and activated. In addition, reading fiction enriches, deepens and diversifies the emotional and sensory experience of students. O. Vashulenko, a researcher at the Institute of Pedagogy of the National Academy of Sciences of Ukraine, researching the reading competence of younger schoolchildren, writes: «Fiction is the

primary basis for the purposeful development of students' emotions and feelings» [22]. Identifying himself with literary heroes, the reader penetrates into their inner world, feelings and experiences, begins to understand the motives of their behavior. This charges him with the appropriate emotions, evokes empathy, encourages introspection and self-development. The impact of works of art on the value sphere of future primary school teachers is important, because in the process of working on a work, a conscious attitude to moral values is formed, and one's own evaluative judgments are made. At the same time, emotional experiences caused under the influence of art are perceived as a value, because they give rise to thoughts, enrich with important life experience.

In the classes, students of higher pedagogical education examine reproductions of paintings by famous artists, discuss what emotions and feelings the painting evoked, select works of art for a certain emotion, correlate their own emotional state with the emotions depicted on the canvas. The teacher talks about the influence of colors on the emotional state of a person. For example, paintings dominated by bright colors raise mood and relieve stress, paintings with natural landscapes calm and reduce anxiety. Performing creative tasks in classes, students have the opportunity to get to know themselves better and share their emotions with their classmates. An interesting task is the creative task «Enliven the picture». The task is performed in groups. From the proposed list of names of pictures, you need to choose the one that depicts the emotions and events that the group members can reproduce. For example, paintings: L. da Vinci «Mona Lisa», J. Vermeer «Girl with a Pearl Earring», J. Vermeer «The Astronomer», J.-F. Millet «Gatherers», E. Vayet «Christina's World», O. Kulchytska «Children on the levada», M. Pymonenko «Christmas Divination», T. Yablonska «Morning», O. Murashko «Sunday», F. Krychevskyi «The Bride», M. Primachenko «Ukrainian Wedding» and others. At the same time, students will learn about the artist to whom the painting belongs, about the plot of the painting and the prerequisites for its creation. Some of the proposed paintings formed the basis of the plot of books and films. After the performance, it is desirable to offer a facilitated discussion, which includes the following questions: «What emotions did the artist depict? Why do you think so? What visual aids testify to this? What do the characters of the pictures feel? Was it easy to reproduce the emotional state of the characters depicted on the canvas?».

As scientists note [10; 12], one of the disadvantages of the process of teaching humanitarian disciplines in a higher education institution is the reproductive nature of teaching and the traditional nature of the organization of learning in classes. Under such conditions, emphasis is placed on the transfer and assimilation of knowledge instead of complex and comprehensive development of the future specialist's personality. In order to solve these problems and improve the quality of teaching humanitarian disciplines in accordance with modern requirements for the professional training of primary school teachers, approaches to the organization of the educational process need to be

reviewed and updated. In view of this, person-oriented, competence-oriented, activity-oriented and axiological approaches should become the leading ones.

In order to strengthen the study of disciplines of the humanitarian cycle with emotional and intellectual content and direct them to the development of emotional intelligence in future teachers, it is important:

- select works of art with emotional potential;
- carry out an analysis of one's own emotional and sensory sphere;
- describe the emotions and feelings of literary characters, the author of the work;
- highlight vivid emotional episodes, analyze the behavior of the heroes in an emotionally aggravated, conflict situation, establish cause-and-effect relationships between the emotional state of the hero and his behavior, consider the possible consequences of emotional behavior, encourage the expression of personal attitudes, thoughts, emotions regarding what has been read;
 - analyze episodes with manifestations of empathy and sympathy of literary characters;
- to represent emotions in language, to enrich students' vocabulary with words that express emotions and feelings;
- master verbal (with the help of language) and non-verbal (mimicry, gestures, pantomime) means of expressing emotions;
 - use exercises, games, dramatization, theatricalization, creative activity in classes;
- use innovative technologies, interactive forms and methods of learning in classes, which contribute to the acquisition of skills in understanding one's own emotions and those of one's teammates, controlling and regulating emotions, switching mood changes, restraining, stopping and overcoming negative thoughts and emotions, optimistic attitude.

The teacher's word is an instrument of psychological influence on the student. The future teachers of primary education learn the art of mastering this tool in the classes of the educational components "Children's literature with the basics of culture and speech technique", "Expressive reading", "Pedagogical skill of the primary school teacher". The nature of the relationship between the teacher and students, the emotional atmosphere of communication depends on the characteristics of the teacher's speech and communicative behavior. Verbal and non-verbal means help the teacher to be expressive, convincing, correct, to organize the interaction of children. With their help, the teacher broadcasts his emotional state to others, ensures the emotional and valuable attitude of younger schoolchildren to knowledge. In the memory of students, not only the cognitive information they received from the teacher is fixed and stored, but also the emotional side of communication: the emotions that came from the teacher and the internal emotional states experienced in the past. V. Sukhomlynsky emphasized the psychotherapeutic functions of the teacher's speech, considering it the basis of the dialogue between the teacher and the students.

In practical classes, students get to know the «secrets» of effective communication: they work on their voice, tonality and emotional-figurative coloring of speech, diction, breathing, develop the ability to own a speech apparatus, speech technique. They perform exercises on breathing and voice production, on determining logical accents in the text, on practicing orthographic skills, i.e. clear, correct, separate pronunciation of sounds. Idioms, short poems, catchphrases, and proverbs help to train speech. In modern conditions, mobile phones, which allow analyzing the quality of one's own voice speech, are a significant help for future specialists. Future teachers practice in external manifestations of emotions, observe the emotional reactions of their peers, learn to interpret external emotional messages. A wide range of feelings and emotions can be reproduced with a facial expression. Students practice using smiles, facial expressions, eye contact, gestures, movements, posture, etc. They also learn about gestures and other non-verbal signals that should be avoided in the teaching profession. An effective means is the use of training exercises, role-playing games, with the help of which their participants have the opportunity to lose those possible situations that may occur in professional activity.

Today, a Ukrainian teacher works in emotionally difficult conditions caused by the war. In such conditions, he needs to take care of the life and emotional state of students, the quality of education, and his own well-being. Students will learn about how a teacher should deal with children who have lost relatives in the war or whose parents are in a war zone, how to reduce the level of anxiety, how to talk about their emotions and feelings and at the same time not forget about themselves while studying academic subjects «Theory and method of education in primary school» and «Didactics and organization of the educational process in primary school».

The acquisition of emotion management skills is important in the development of emotional intelligence. As the results of our survey of primary school teachers showed, it is the inability to control and manage the intensity of one's emotions, the inability to stop in time, especially in critical situations, that is the cause of conflict not only with students, but also with their parents, colleagues and school administration. Under the influence of emotions, a person perceives information in a biased way, acts impulsively, and is capable of making wrong decisions. Therefore, one of the main tasks that arises in the process of developing the emotional intelligence of future primary education specialists is to equip them with emotion management techniques. Managing emotions, that is, emotional self-regulation, is a complex process, but it can and should be taught to students through training. Having learned to curb his emotional impulses, the individual begins to respond to the situation in an acceptable way. If a person learns to manage his own emotions, it will not be difficult for him to emotionally influence other people and manage the emotions of others.

In the process of studying the educational disciplines «Psychology» and «Age and Pedagogical Psychology», students work on the topic «Emotional-volitional sphere of personality».

They learn about ineffective, but the most common ways of managing emotions in our lives: reckless release of emotions (shouting, hitting dishes, other things, blaming other people, etc.), suppression, avoidance. Analyze each of these methods, determine its harmfulness for themselves and others. To constructively manage emotions means not to hide, suppress and constantly restrain them, which, accumulating, leads to an emotional breakdown and negative consequences, but to choose from all possible options of emotional reactions the one that will help to effectively cooperate with people. In the classes, students get acquainted with effective techniques of emotion management and learn to choose healthy strategies in their behavior.

Future primary school teachers model possible pedagogical and conflict communication situations, stage them using various self-regulation techniques. For example, the «Pause» technique. Its essence is that at the moment when a person is overwhelmed by strong emotions and he wants to say a lot more to his opponent, he needs to take a break - slowly count to 30. This allows him to cool down and take control of his emotions.

The next technique is "Take a step back". In an emotionally stressful situation, tell yourself "Stop!" and mentally, and even better physically, take a step back. To move away, to distance oneself from one's interlocutor virtually or physically, means to retreat from non-constructive actions, emotions and thoughts, to withdraw in order to gather one's thoughts. When you retreat, ask yourself, "Do I want anger to take over and control me? What could be the consequences of my behavior? What do I really want?". It often helps to relieve the build-up of emotional stress by switching attention to something else: remembering an urgent phone call; go to the toilet; drink water or any other option that will give a timeout of a few minutes. This will help to switch from the mode of action to the mode of analysis, to look critically at the situation. After calming down, you can see that everything looks a little different.

Another «recipe» for managing emotions is visualization techniques. The moment of rising emotions can be stopped if you allow your imagination to «play out»: «Imagine that the person who causes you negative emotions decreases in height, and his voice becomes so weak that you gradually stop hearing him. As it decreases, you feel calmer, more confident and stronger». Or: «Imagine your opponent in a narrow street. Buildings come to life and gradually squeeze it. He starts to run, fuss, but he can't get out of the trap. It makes you laugh, and negative emotions turn into positive ones». A sense of humor, laughter always relieves the situation, reduces tension. Visualization helps to mentally transfer to pleasant memories, to the sea coast, to the spacious sky, to dissolve in these thoughts. As a result, there is a state of relaxation and peace. Having reduced the tension, in a state of calm, you need to critically analyze the situation and your emotional reactions to it.

Emotions can be controlled through the body. At the moment of increasing negative emotions, it is recommended to write in a notebook or phone: your feelings, thoughts, claims, dissatisfaction,

express your emotions on paper, without limiting yourself in expressions. Psychologists call this technique «Stream of consciousness». Once the anger has passed, the records should be burned or torn up. «Instant help strategies» help significantly. For example, change the position of the body (stand up, do some exercises, walk around the room); count from 1 to 10 and vice versa; name six colors in the room; name three red objects; switch perception to recognizing sounds in the room and beyond; slowly drink a glass of water, savoring it; walk, focusing the sensations on the feet; touch the back of the wall or furniture, feel their texture; look out the window, name four trees; walking down the street, count the windows in the house, etc.

Muscle relaxation is provided by physical exercises: for arms, legs, trunk, neck, other physical activities: running, dancing, gym. Physical activity allows hormones, the activity of which was activated under the influence of negative emotions, to return to normal. It is not surprising that athletes who engage in combat sports, in order to give vent to negative emotions, hit the «pear».

Screaming exercises, which students like the most, help to get rid of accumulated anger and resentment. To perform them, it is desirable to be alone in a sports hall, in a park, or in a forest. Examples of such exercises: scream into a pillow, into a «screaming glass», into a «screaming bag»; shout references to aliens in intergalactic space. It is desirable to shout until the feeling of devastation sets in.

To perform the «Silent Shout» technique, students stand in a circle. It is aimed at the release of aggression, anger, fear, and other acute emotions and is «first aid» when: a situation has just arisen that has activated negative emotions; a conversation with a person who causes unpleasant feelings is expected; in case you feel fear, despair, panic. Exercise unblocks compression, nerve clamps that have formed in the body, promotes blood circulation. It also destroys the neural connections between the left hemisphere of the brain, which is responsible for logical thinking, and the right hemisphere, which is responsible for imaginative thinking, that is, it destroys the neural connections between thought and emotion. Before starting the exercise, you need to focus your mind on the negative emotion you recently experienced. To perform the exercise, you should take a «boxer's pose», inhale, contract, strain as much as possible, count to three, and relax, exhale. Perform 5-7 approaches, you can do it several times a day, depending on the situation.

In order to preserve their health, but at the same time not to «conserve» negative emotions in themselves, future elementary school teachers are taught to bring them out in a way that is safe for other people. The most effective tool for ecological expression of emotions is art: painting, music, theater, dance, poetry. Reflections and stabilization of the emotional state are helped by various techniques of fine art: spotting, drawing with a quack, pipette, toothbrush, soap bubbles, drawing on wet paper, finger painting, and others. Students get acquainted with these techniques in classes from various disciplines: «Methodology of teaching the art education field», «Methodology of teaching

the integrated course «I explore the world», «Organization of the educational process in extended day groups». Through drawings, students of higher education learn to give vent to their negative emotional experiences, eliminate fears and anxiety states, splash out negativity in the drawing. The Mandalotherapy technique is endowed with an art-therapeutic effect - an outpouring of accumulated emotions through spontaneous drawing of scribbles, circles, dots, sticks, repeating patterns. The main thing is to draw until the emotional state improves and the mood improves. Mandalotherapy is valuable not for its drawings, not for the result, but for the drawing process, which has a therapeutic effect. The word «mandala» in translation means «circle», «disk». Literally translated, «mandala» means «drawing in a circle». Drawing mandalas relieves emotional stress, promotes relaxation, harmonizing the inner state, filling oneself with positive emotions. In the process of creating mandalas, a person gets rid of images, fears, is filled with vital energy, reveals his unconscious resources and possibilities.

The founder of analytical psychology, the Swiss scientist K.G. Jung showed a special interest in mandalas. He called them one of the most powerful archetypes, an unconscious image, a visible projection of the psychic. Every morning for ten years, he drew a mandala in his diary that corresponded to his inner emotional state. After analyzing his drawings, he realized that the circles turn out to be harmonious if he is in a joyful, upbeat mood. If he was in a depressed state, the lines in the pictures came out crooked, interrupted. This led him to believe that the mandala reflects the state of mind of its author at the time of drawing. Gradually, he came to the conclusion that the mandala is a way to the center of a person, to his uniqueness. In other words, creating a mandala means getting to know yourself, looking for a way to yourself. In his practice, the scientist actively used mandala therapy in the treatment of patients suffering from mental disorders of consciousness.

The technique «Collage of Emotions» helps to visualize one's own emotions, realize them and regulate their duration and intensity. Students are invited to prepare unnecessary, old newspapers, glossy magazines, photos, and books for class. At the lesson itself, future teachers should choose from a selection of materials those images that correspond to their emotional state at the present moment. The work begins with the question: «What do I feel now?». You also need to remember the emotions you experienced during the last few days and find the corresponding images. Pictures are cut out and pasted on paper, creating a collage. After the work is ready, it is worth discussing what is depicted on it: «What do these drawings mean to you? What emotions did you want to convey with them? What memories are they associated with? What was your emotional state when you created the collage? If you could add music to a collage, what would it be? If you would name your job? Which of your friends, relatives, relatives would you like to show your «Collage of Emotions»?».

Quasi-professional activity, which is widely used in the educational process of the university, occupies a special place in the development of emotional intelligence skills of future primary school

teachers. Imitating a lesson or its fragment in classroom conditions, students turn from passive listeners into active participants and creators of the educational process. They transform themselves into the role of a teacher and have the opportunity to immerse themselves in a real lesson, experiencing the emotions that a teacher feels: both excitement for the correctly selected didactic and visual material for the lesson, and concern for the organization of group work and the inclusion of computer equipment, and concern for the quality of knowledge students, etc. As a result of conducting such lessons, students recognize the need to develop emotional self-regulation skills, the skills to establish emotional contact with the class, the ability to emotionally influence the interlocutor, the ability to «read» thoughts, the emotional states of students, their attitude to what the teacher is talking about, based on verbal and non-verbal signals. That is, future teachers are convinced in practice of the importance of mastering the skills of emotional intelligence. Quasi-professional activity makes it possible to feel and analyze internal processes that are new for the student, to carry out a self-assessment of emotional behavior, to work on mistakes. Quasi-professional experience helps to look at the teaching profession in a new way, lays the foundations for the transition from educational activity to professional activity, motivates for personal and professional improvement.

Group interaction, teamwork is of great importance for the development of emotional intelligence and for the development of personality in general. Only live communication, joint activities, project work, interactive forms and methods of learning, which are based on social interaction, enable the teacher to solve this difficult task - the development of the emotional intelligence of the personality of the future primary school teacher. Emotional contact in the process of joint activity, the opportunity to show one's own emotions, to see and recognize the emotions of one's comrades, to take into account their wishes, intentions, allow to build communication on the basis of partnership, equality, trust and mutual respect. By learning together and interacting with each other, students learn to understand each other's non-verbal emotional messages, learn to respond correctly to the emotions and words of others, control their own emotions, and correct their own behavior. They develop empathy skills, increase motivation, and develop a sense of community. The development of emotional intelligence contributes to the establishment of friendly relations, a positive attitude towards each other is formed, and communication and relationships in the student group improve. In the process of research work, we were able to observe positive dynamics not only in the professional and personal development of students, but also in their attitude towards each other. Instead of the usual reaction of anger and irritation towards their fellow students, students began to show patience, full of understanding of their individual psychological characteristics.

Thus, emotional intelligence is an extremely important psychological property that must be developed at a high level in a primary school teacher. In the conditions of war, which Ukrainian teachers are living today, its importance is doubled. Our survey of primary school teachers, aimed at

studying the level of development of emotional intelligence, revealed certain shortcomings and difficulties that negatively affect the organization of the teacher's interaction with the participants of the educational process, primarily with younger schoolchildren, on the construction of communication, on the students' assimilation of educational material and overall success, and, of course, on the well-being and psychological well-being of the teachers themselves. To eliminate these problems, it is necessary to improve the content and organization of professional training of future primary school specialists during their studies at the university. Educational activities have significant potential for the development of emotional intelligence of higher education students. We tried to present the experience of Zhytomyr Ivan Franko State University in developing emotional intelligence skills in students of the first (bachelor's) level of specialty 013 Primary education. The work was aimed at: the development of self-knowledge skills, awareness and recognition of one's own emotions, enrichment of students' emotional vocabulary, development of self-control and selfregulation of emotional states, skills of safe expression of emotions, skills of interpreting and recognizing other people's emotions and managing them, skills of empathy, social skills, skills reflections etc. We have recognized the following as effective forms and methods of developing emotional intelligence in future primary school teachers: exercises for self-awareness and reflection, exercises for the development of an emotional vocabulary, techniques for self-regulation, breathing practices, gymnastics and self-massage of the face, physical exercises, exercises for relieving stress and emotional tension, shouting exercises, practice of keeping an emotion diary, exercises for the development of the speech apparatus, techniques speech, physical techniques, «strategies of immediate help», training exercises, role-playing and business games, writing letters to the body, one's emotions, staging, dramatization, creative tasks, using art tools (fiction, visual arts, painting, music, dance), art-therapy techniques, mandala therapy, quasi-professional and joint activities and others.

We see the prospect of our further research in the development and implementation of the selective educational component «Development of emotional intelligence in future primary school teachers» in the system of training students of specialty 013 Primary education of Zhytomyr Ivan Franko State University.

REFERENCES:

- 1. Basiuk N. A. Emotional intelligence and mental health of participants in the educational process: study guide. Zhytomyr, 2024. 140 p.
- 2. Common European Principles for Teacher Competences and Qualifications. European Commission, 2004.

- 3. Council Recommendation of 22 May 2018 on key competences for lifelong learning (Text with EEA relevance) (2018/C 189/01). URL: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX :32018H0604(01)&rid=7
- 4. Denisova M. F., Muzyka N. M., Shkiryak-Nizhnyk Z.A. Adolescent aggression: causes and risk factors. *Child's health*. 2019. Issue 14. №8. P. 470 474.
- 5. Goleman Daniel. Focus : The Hidden Driver of Excellence. URL : https://is.muni.cz/el/med/jaro2021/MIMO041p/111500888/Daniel_Goleman_-

Focus the hidden driver of excellence-Harper 2013 .pdf

- 6. Hlushko Oksana. The European Framework of Personal, Social and Learning Key Competence (LifeComp): a conceptual dimension. *Ukrainian Pedagogical Journal*. 2023. №4. P. 35-45.
- 7. How to further develop Ukrainian education. URL https://osvitoria.media/experience/liliya-grynevych-yak-dali-rozvyvatysya-ukrayinskij-osviti/
- 8. Kravchyna T. Reflective position of the teacher: methods and techniques of reflection of pedagogical activity. *Education. Innovation. Practice*. 2022. Volume 10, №7. P. 39-43.
- 9. Kyrylenko T. Emotional sphere of personality: study vectors // Bulletin of Taras Shevchenko Kyiv National University. «Psychology» series. 2018. Vol. 1. №8. P. 26-30.
- 10. Myshak O. O. Pedagogical conditions for the formation of humanistic orientation of future biotechnologists // Actual problems of pedagogy, psychology and professional education. Kyiv, 2017. №2. P.50-58.
- 11. Nosenko E. L., Trulyaev R. O. Positive values as a factor in the personal development of subjects of education: monograph. Dnipropetrovsk, 2014. 155 p.
- 12. Oliynyk N. A. Actual problems of teaching humanitarian cycle disciplines in agricultural educational institutions // Pedagogical sciences: coll. of science works 2020. Issue 91. P. 81 86.
- 13. Palamarchuk V. F. Didactic conditions for the formation of students' thinking in the training process: diss. ... doctor of pedagogy Sciences: 13.00.04. Kyiv, 1984. 327 p.
- 14. Pavelkiv R. V. Reflection as a mechanism of personal and professional development of future teachers // Psychology: reality and prospects: coll. of science works of the Rivne State Humanities University. 2019. Issue 12. P. 5-11.
- 15. Roiz Svitlana. Inhale exhale. Cards for breathing stabilization practices. URL : https://www.unicef.org/ukraine/media/26001/file/Breathe_cards_Royz.pdf

- 16. Rothbart Mary K., Posner Michael I., Sheese Brad E. Temperament, Personality and the Development of Brain Networks. Handbook, 2019.
- 17. Socio-emotional and ethical education: curriculum for primary school / head. ed. O. Elkin. Kharkiv: House of Advertising, 2021. 339 p.
- 18. South M., Larson M. J., White S. E., Dana J., Crowley M. J. Better fear conditioning is associated with reduced symptom severity in autism spectrum disorders. Autism Res. 2011. №4. P. 412 421.
- 19. Stas T. V. Formation of the emotional culture of future primary school teachers by means of visual arts: autoref. thesis ... candidate ped. Sciences: 13.00.04. Odesa, 2014. 25 p.
- 20. The Definition and Selection of Key Competencies. Executive Summary. OECD, 2005.
- 21. The Eighth National Survey: Psychological Markers of War. SG «Rating». 2022. URL: https://ratinggroup.ua/research/ukraine/
- 22. Vashulenko Oksana. Emotional and valuable component in the structure of reading competence of a junior high school student. URL: https://lib.iitta.gov.ua/id/eprint/10114/1.pdf
- 23. Yi-Yuan Tang, Posner Michael. Chinese mindfulness meditation prompts double positive punch in brain white matter. Proceedings of the National Academy of Sciences. 2012. URL: https://medicalxpress.com/news/2012-06-chinese-meditation-ibmt-prompts-positive.html

THEORETICAL FOUNDATIONS OF THE MODEL FOR DEVELOPING CREATIVITY IN ELEMENTARY EDUCATION LEARNERS DURING ENGLISH LANGUAGE LESSONS THROUGH COLLABORATIVE LEARNING METHODS IS PRESENTED

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The paper examines the theoretical foundations of developing creativity in elementary education learners during English language lessons through collaborative learning methods. It is analysed the development of creativity in elementary education learners as a pedagogical issue, identifies the components of learners' creativity, and explores the pedagogical conditions that contribute to its development. The concept of collaborative learning and its toolkit are investigated, upon which a model for developing creativity in elementary education learners during English language lessons through collaborative learning methods is presented.

The growth of global competition and rapid changes in the contemporary world demand new educational strategies aimed at developing a wide range of skills, including creativity and foreign language competence. Society's need for a creative individual proficient in a foreign language is reflected in legislative acts on education, emphasizing the perspective of nurturing a unique, unparalleled person with creative abilities and the ability to communicate freely in both national and foreign languages. The Ukrainian legislation, including the Law of Ukraine "On the Education", "The National Program for the Development of Ukrainian Education in the 21st Century", sectoral standards of higher education, and the Strategy for the National Development of Education of Ukraine for 2021-2025, indicates that education should not only provide students with the formation of a system of knowledge and a scientific worldview but also develop their creativity and communication skills in Ukrainian and foreign languages. In line with strategic priorities, primary foreign language education responds to modern demands by enriching children with necessary quality information, helping them realize their natural potential, and focusing on universal and national values.

A properly constructed educational process from didactic and linguistic aspects contributes to enriching various spheres of activity of elementary education students and has independent educational significance. However, to ensure that students do not lose the joy of discovery, the desire to learn, and gradually do not lose their ability to be creative, the process of learning a foreign language must be properly organized. Therefore, there is a need to pay more attention to developing

the creativity of elementary education students in English language lessons under appropriate conditions of education.

Many scholars have researched the problem of creativity development. D. Zerbin, V. Molyako, H. Polyakova, V. Rybalko, E. Fromm, R. Steiner, and others have investigated the formation of a creative personality and the principles of creative activity of learners. Sh. Amonashvili, H. Vashchenko, V. Sukhomlynsky, and others attached great importance to organizational work in developing the creative abilities of general secondary school students. The issue of developing creativity in the study of the English language has been explored by F. Barron, P. Vechino, E. Kononikhina, T. Kravchuk, O. Kuzhel, D. Lennon, Yu. Lininska, L. May, M. Nayman, O. Onisyuk, K. Richards, T. Rogers, O. Skrapchenko, H. Weiser, M. Wallace, Ye. Shevchenko, and others.

The issue of using collaborative learning as a form of organizing a favorable educational environment for elementary education learners has been examined by D. Barnes, P. Delenbourg, F. Kagan, U. Kress, J. Kimmerle, J. Spencer, F. Todd, K. Starman, and others. However, despite the wide range of research on the development of creativity in English language lessons and the potential of collaborative learning in education for primary school students, the problem of developing learners' creativity in English language lessons through collaborative learning has been insufficiently investigated. The search for possible solutions to this problem has led to the focus of this study on the opportunities of collaborative learning for fostering creativity in elementary school students during the acquisition of a foreign language.

Considering the development of creativity in elementary education students, it is noteworthy that junior school is pivotal for fostering creativity, as the beginning of systematic educational activities is the best period for purposeful development of individual creative qualities. Since rigid thinking and behavior have not yet become predominant in students of junior school age, there is an opportunity for them to deeply assimilate creative activity techniques, complex thinking operations, and forms of behavior that require creative activity. It should be noted that rigid thinking is the inability of an individual to adapt to unexpected environmental changes [1].

Creativity is considered as a higher-order thinking skill based on complex and formal thoughts associated with the creation of new and valuable ideas.

Higher-order thinking skills are skills associated with competent and strategic thinking, including critical, creative, and metacognitive thinking, also known as deep learning [1]. Additionally, creativity is now viewed as a cross-cutting skill necessary for achieving effective and high-level learning and professionalism.

Despite the identified need for the development of creativity in R. Shyan's [21] and O. Savchenko's [22] educational programs, there is a general tendency to reproduce teaching and

learning models and to limit the teacher in the search for creativity teaching procedures, resulting in minimal development of creativity in learners, with a predominance of reproductive learning.

There is no unanimous consensus on defining creativity; most scholars advocate for understanding creativity not only from the results or products obtained but also from the process through which they are achieved. In this sense, it is relevant to cite A. Gardner's definition. The scholar notes that a creative individual is someone who regularly solves problems, develops new products, and defines issues in fields that are initially new but eventually become accepted in a certain cultural context. This definition encompasses four approaches to researching creativity: personality, process (problem-solving), context, and new product [19].

Indirectly, this suggests that for elementary school students, learning creativity is akin to learning reading, writing, and arithmetic. Children's readiness to explore the new and unknown, their desire to act, and their high degree of adaptive potential are evidenced in developmental learning technologies, as confirmed by the works of V. Davydov, D. Elkonin, L. Zankov, and others.

The junior school stage is a sensitive period for the development of students' creativity, as it is a period of rapid physical and psychological transformation. The concept of creative education from the elementary level has been the subject of research by scholars such as N. Didyk, S. Sysoyev, A. Khutorsky, and others.

The problem of developing the creativity of primary education learners is actualized by the need to develop their personality from the early years of education, as this period lays the foundation for their creative life. According to the Concept of the New Ukrainian School, education in modern schools should provide optimal conditions for the self-realization of students' personalities, the disclosure of their natural talents. The development of creativity should be an integral condition of the content of all educational areas taught in primary school and complement the educational process to ensure the fundamental integrity of the knowledge, skills, and creativity of primary education learners.

According to the logic of this study, let's consider the essence of creativity among elementary education learners. Thus, according to the definition by T. Vorobyova [8], the creativity of young schoolchildren is a general characteristic of learners' personalities, elementary manifested in their educational and cognitive activities, determining their creative orientation and ability for independent thinking. Choosing the best and most original way to solve educational tasks, creating new ideas, products, the novelty of which can be objective or subjective.

The core of creativity among young schoolchildren consists of creative abilities, which are an inseparable part of the overall capacity of an individual's personality, manifested in creative methods, cognitive activity, and critical thinking in educational and cognitive activities.

Creative abilities of primary education learners are understood as a set of individual psychological characteristics that determine learners' ability to successfully engage in educational and creative activities. They are revealed and developed in the same process of educational and creative activities.

L. Vygotsky proposed a theory about age as the focus of analyzing child development, offering a new understanding of the conditions, sources, forms, stimuli, and specifics of a child's mental development; he described the stages and phases of child development, as well as transitions between them in the process of ontogenesis; he discovered and formulated the fundamental regularities of a child's mental development [19].

Research by O. Antonova, I. Filipov, I. Bekh demonstrates the importance of cognitive and social motives for learning in the development of creative abilities among elementary education learners.

- O. Antonova [1] points out the leading role in creative development of the individual, especially in identifying learners' inclinations towards various types of activities, which belongs to individual activity and the significance of the individual and motivational factors.
- I. Filipov [19], in the context of implementing the leading directions of state policy in pedagogical education, points out that among the fundamental democratic principles of Ukrainian education is equality of conditions for the full realization of each person's talents.
- I. Bekh [2] emphasizes that the education received by a child at a young age is of particular importance for the development of creative abilities. Currently, the issue of developing the creative abilities of primary education learners is actively being researched, with notable contributions from S. Havrylenko [9].

Every child has innated creative abilities. Creativity is the process of bringing something new into experience: formulating new ideas or introducing new concepts, experiencing new feelings or envisioning certain images, which are immediate regulators of creative actions.

Therefore, in this study, analysing the concept of creativity among primary education learners, we consider creativity as the ability to bring something new into experience, and this skill can be developed during the educational process. We adhere to the view that creativity is not a type but unquestionably a style of activity. Thus, the concept of "creativity of elementary education learners" will be defined as the ability of primary education learners to find unconventional solutions and create new activity products based on their existing general and educational competencies while performing various tasks in the educational process of primary school.

In the process of developing creativity in primary school students, they will rid themselves of banal ideas and mundane, conventional views on things and will create original solutions. Creativity makes the thinking process engaging and helps find new ways to solve old problems.

Having analyzed the scientific works of V. Bykov, T. Vorobyova, I. Haberkorn, T. Havrylenko, H. Hapon, S. Hin, J. Guilford, V. Molyako, V. Romenets, and others, we have identified the components of educational learners' creativity that can be optimally developed in the educational process: creative thinking, imaginative ability, and creative literacy. They are closely interconnected and can develop simultaneously in the educational process and creative activity. Let's consider each of them in more detail.

Imaginative *ability* is one of the most important components of human abilities, especially in childhood. Creative imagination depends primarily on skills such as creating new images, establishing new connections between objects, phenomena, concepts, etc.

Creative *thinking* defines the creative orientation of various activities of primary education learners. Critical thinking is the ability of students to analyse, evaluate information, and independently choose the best way to solve problems. Creative thinking is the ability to generate new ideas and improve existing ones, finding alternative problem-solving approaches.

Creative *literacy* includes mastering the basic techniques of searching, analyzing, and productively processing information, which determine the effectiveness of creative activity.

The scientific contributions of J. Guilford [10] are valuable within the scope of our study. The researcher identified the following components of creativity:

- fluency (ease, productivity): assessed by the number of ideas generated within a certain period;
- originality: expresses the ability to generate ideas that differ from commonly accepted ones;
- flexibility of thinking: indicates the ability to formulate various ideas, switch from one aspect of the problem to another, and use various problem-solving strategies;
- elaboration, refinement: emphasizes the necessity of researching and refining a creative solution regarding its relevance to the problem and structuring it in a way that makes it understandable and meaningful to others.

It is noteworthy that besides working on the development of components and aspects of creativity in primary school students, conditions should be created for their development. The opinion of psychologist Yu. Gatanov [10] is relevant, who believes that the following conditions are necessary for fostering creativity: not limiting freedom of behaviour; applying forms, methods, and techniques for developing creative thinking; creating conditions for the imitation of creative relationships.

In primary school, favourable conditions should be created for the comprehensive development of educational learners, the manifestation of their interests and abilities. Generalization of the results of analysis from various sources has allowed identifying pedagogical conditions conducive to the development of creativity in elementary education learners.

Among them are internal conditions: psycho-physiological assets (development of language, visual metaphors, imagery, logical thinking, adequate level of creative imagination, voluntary attention, metaphorical and semantic memory); social assets (readiness to accept the influence of adults; assimilation of behavioural norms and rules, mastery of learning methods, and understanding of the surrounding world), intellectual, practical, and emotional experience.

External conditions include: creating a creative educational environment for student activities in class; teachers should systematically use interactive, inquiry-based teaching methods; foster students' independence in creative activities; students emulate the creative activities of the teacher; the social environment. Additionally, creating a conducive educational environment in the classroom involves: fostering respect in students for the feelings and emotions of others, as well as creating opportunities for their creative development. The result of this process is the formation of personal qualities necessary for the creative activity of learners.

Creating these conditions in conjunction with an appropriate developmental atmosphere in the classroom, where teachers act as coordinators of the educational program, ready to assist every child, instilling confidence in the abilities of educational learners, is crucial. As L. Vygotsky [16] noted, experience is the basis of any creative activity. Therefore, parents and primary school teachers should encourage independent exploration of the world by educational learners, using sensitive and non-intrusive guidance.

Therefore, having considered the concept of creativity in general, as well as in primary school students, particularly identifying its components and constituents (speed of thought, originality, flexibility of thought, development and refinement), let us further examine the current state of creativity development in primary school students in English language lessons in the New Ukrainian School (NUS).

According to the new National Standards of Primary Education (Resolution 2018), educational activities should aim at developing the most important life skills in primary education learners, including foreign language communication. Therefore, the goal of the new Ukrainian school is to transition from the concept of knowledge accumulation to the comprehensive formation of communicative and other key abilities based on the studied language and speech material, the development of creative thinking in primary education learners towards constructive intellectual activity, conscious perceptual information assimilation, and further consolidation [18].

The formation of an independent, creative personality, which is necessary and can self-realize in any sphere of life activity, has always been considered one of the main tasks of education. It should be noted that language education occupies an important place in society. The realization of the necessity of mastering at least one foreign language came to Ukrainian society quite a while ago. For any professional, if they want to succeed in their field, knowledge of a foreign language is vital, and

with Ukraine's aspirations to join the European Union, the motivation for its study has sharply increased. However, difficulties in mastering a language, especially in a mass school setting, have not diminished.

A properly constructed educational process both pedagogically and linguistically contributes to the enrichment of all spheres of a child's life. Modern trends in language teaching involve the development of skills and the acquisition of language proficiency, rather than the acquisition and accumulation of a certain set of grammatical rules and vocabulary. The foundation of language proficiency lies in a person's readiness and ability to analyze and evaluate communication situations, all factors that determine them, and to make adequate decisions regarding language behavior.

By examining the current state of creativity development in primary education learners in English language lessons, we analyzed typical educational programs of the New Ukrainian School by O. Savchenko [21] and R. Shyian [22].

Thus, the methods of teaching English in the first and second grades are based on child-centered, competency-based, and activity-based approaches, combined with means aimed at achieving expected educational outcomes. This is highlighted in the works of O. Bochkovska, I. Dushnytska, V. Kazachiner, O. Kolesnyk, O. Savchenko, Ye. Yarova, and others.

The first stage of foreign language learning is crucial for the entire course of study. According to the Conceptual Principles of Secondary Education Reform "New Ukrainian School", two cycles of primary education are envisaged: 1) adaptation-playful (grades 1-2); 2) basic (grades 3-4) [18].

Such a structure encourages teachers to choose specific forms, methods, and teaching techniques for foreign language learners. For example, at the first stage, preference should be given to playful activities and individual characteristics of students should be taken into account; teaching foreign language communication should be organized through activity using playful methods.

According to O. Bochkovska [5], those who intensively study foreign languages show greater attention, concentration, patience, and understanding compared to peers who are not interested in foreign languages.

Educational programs by O. Savchenko [21] and R. Shyian [22] have their differences. R. Shyian directs the purpose of the program towards developing students' ability to use language in everyday and social life, while O. Savchenko [21] sees the goal in developing the child itself through language, forming competencies and abilities to use language according to psychophysiological characteristics, so, the program is based on the principle of child-centeredness.

It can also be noted that for the development of creativity in primary school students, both educational programs by O. Savchenko [21] and R. Shyian [22] are aimed not only at forming foreign language communicative competence but also at general learning skills, tolerance, general culture, and creativity development. Accordingly, the purpose of studying a foreign language, according to

typical programs, lies in "forming communicative competence in students, which is provided by linguistic, speech, and sociocultural experience, consistent with the age capabilities of younger students" [21]. However, specific methods, means, and forms of pedagogical organization of the educational process that would guarantee the quality and effectiveness of creativity development in primary education learners in English language lessons have not been identified.

Further examine well-known and widely used methods, techniques, and tools for fostering creativity in primary education learners during English language lessons.

Students who begin learning a foreign language at a young age not only perform better in school and have a better grasp of the foreign language curriculum but also demonstrate non-standard thinking and the ability to make independent decisions. However, to ensure that primary education learners do not lose the joy of discovery, the desire to learn, and gradually lose their ability to be creative, the process of learning a foreign language cannot be reduced simply to memorization and imitation of activities, resulting in monotony and repetitive tasks. Thus, methodologically sound and creatively organized educational processes in foreign language learning aimed at developing creativity in primary education learners are highly relevant.

First and foremost, students in primary classes learn the ways of language activity, so the development of communicative abilities is one of the main goals of education. Enhancing the effectiveness of creativity development can be significantly improved through the continuous use of creative tasks. In the process of working on them, students apply their knowledge, skills, and abilities. While solving such tasks, students create various creative products, such as stories, fairy tales, poems, drawings, films, crafts, etc [7].

Today, in modern world language teaching methodology, the project method is widely used, allowing for the organic integration of knowledge acquired by primary education learners from various fields, solving practical problems, and stimulating the development of individual creativity of students. The project arises and develops from a specific situation that arises during work on any educational topic, discussion of readings, current events, etc.

Working on a project opens up opportunities for engaging intellect, experience, consciousness, as well as feelings, emotions, and volitional qualities of individuals. It promotes a deep immersion in educational material, determination of personal feelings and values related to it, which enhances the effectiveness of learning and creates a sense of accomplishment. The project work method encompasses mechanisms of memorizing and reproducing information, transmitting information to others, applying knowledge in variable situations, understanding cause-and-effect relationships, relating parts to the whole, providing arguments and evidence, rearranging individual parts, and creating a new whole, etc.

The project method not only helps identify the potential and abilities of primary education learners but also facilitates the awareness and evaluation of personal resources, determining personal-significant and socio-value perspectives.

The essence of the project methodology lies in the fact that the goal and the ways to achieve this goal are determined by the primary education learner based on their interests, individual characteristics, needs, motivations, and abilities. Person-centered learning, which is the basis of the project method, involves a shift from the traditional interaction scheme of teacher-student, subject-object, to a scheme of partnership educational cooperation, where both sides interact as subjects. However, despite all the advantages mentioned, it should be noted that this method is not universal, as it requires extensive preparation for its implementation by education learners.

Development of creative thinking during language warm-up and reflection. Language warm-up plays a significant role in teaching a foreign language. The purpose of language warm-up is to practice the use of specific grammatical phenomena in language, typical for the target language. Students receive material for auditory perception and speaking. During such warm-up activities, a language environment is created in the classroom from the first minutes of the lesson, with all primary education learners engaging in speech activity.

At this stage of the lesson, the use of cinquain can be applied - a form of activity that promotes creative development of the student, encouraging independent thinking and creation. Cinquain is a verse that synthesizes information in a concise form, allowing for the description of the essence of a concept or reflection based on acquired knowledge. Such verses can be composed of individual sounds, words, grammatical constructions, etc. After writing such a verse, it can be practiced chorally.

Moreover, cinquain is a versatile form that can be used during the reflection stage as well. "The ability to summarize information, express complex ideas, feelings, and imaginations in a few words is an important skill. It requires thoughtful consideration and a rich vocabulary. Cinquain is a quick and powerful tool for reflection, as it enables summarizing information, expressing complex ideas, feelings, and representations in a few words, which is not easy. Undoubtedly, interesting use of cinquains as a means of creative self-expression. The activity can be organized both individually and in pairs" [6].

Although cinquain is an effective means of developing creativity in primary education learners, teachers need to spend a lot of time preparing such exercises, which does not allow for their use in every lesson.

In the development of creativity during vocabulary activation, the application of the Theory of Inventive Problem Solving (TRIZ) contributes. TRIZ methods teach primary education learners to think, and they can be used at various stages of the lesson, promoting the development of such components as flexibility, originality, and speed of decision-making.

Another quite interesting example of developing creativity is the use of the "Six Thinking Hats" method. It allows overcoming difficulties by dividing the thinking process into six different stages represented by hats of different colours. Instead of thinking about everything at once, we think about everything one at a time. At the end of the work, all aspects come together, and we get a complete picture.

Providing a brief description of this method. The white hat – only facts; what we know, what needs to be known, how to get information; The red hat – only emotions, feelings, intuition – at some stage, this is necessary; The yellow hat – positive aspects, advantages of a new idea; The black hat – all the negatives and drawbacks, risks of a new task; The green hat – creativity: developing ideas, inventing new ones, exploring; The blue hat – managing the entire work process. It is used at the beginning to determine what needs to be done, and at the end to summarize the achieved results and set new goals [4].

The sequence of hats is determined by the specific task. The essence is that everyone simultaneously "puts on hats" of the same colour and works as a team. In English language lessons, it is possible to simply symbolically designate markers of different colours. For example, on the topic "Leisure. The world of reading," primary school students were required to write a reflective essay on the topic "Are libraries necessary in the modern world," and the "six thinking hats" method helped organize the work. Thus, by asking "Are printed publications needed in our time?" and unanimously shouting "Yes! Of course!" – "the red hat" - the students started analysing the situation and found out how often we use printed books ("the yellow hat"). Then, "putting on the black hat," they discussed all the negatives, negatives. After that, "wearing the green hat," they began to think about ways to solve the problem. At home, everyone thought about and wrote their mini-essay independently. Thus, "Changing hats" changes the direction of thinking, "putting on a hat" focuses thinking. "Changing" hats, we give thoughts the necessary direction [4], which also develops the component of flexibility of thinking and components of creative thinking and imagination. However, although the "Six Thinking Hats" method is effective for developing creativity, it takes a lot of time in the lesson, which slows down the efficiency of learning new material, so it cannot be applied systematically and it is difficult to conduct with students of grades 1-2, as it is difficult for them to express their thoughts.

Next, to develop the creativity of elementary school students, let's consider the effectiveness of the brainstorming method. Brainstorming is a way of creating a previously unknown product for students based on the results of their specific mental actions. Storytelling is one of the applications of this technique. For this exercise, primary education learners sit in a semicircle. They attempt to make their narrative as coherent as possible. During the time when students are forming their narratives, the teacher should stimulate them to use vocabulary and provide assistance in this process. However, it should be noted that although storytelling contributes to the development of creativity and trains

communicative skills, students encounter difficulties in composing narratives and presenting their ideas, which raises doubts about the possibility of its systematic application for primary school students.

Analysing existing techniques for developing the creativity of elementary education learners. Among them, the most effective for fostering creativity are interactive learning methods, such as cooperative and collective group learning. The interactive method of cooperative learning involves paired and group work organized in lessons for the acquisition and application of knowledge, skills, and abilities. The most common techniques of cooperative learning include reciprocal (variable) triads, "two-four-together," "carousel," etc. Group learning methods, utilizing collective forms (e.g., "microphone," unfinished sentences, "saw," "mosaic," etc.), involve simultaneous work of the entire class. Assessment of situational modeling and problem issues involves creating interesting and non-traditional situations, as well as posing visual tasks that require primary education learners to use imagination, fantasy, and creative thinking.

The methods of using interactive approaches in English language lessons in primary classes encompass a wide range of tools aimed at active student participation in the educational process. These include: "Mystery Objects," where students study objects and contemplate their purposes; "Broken Telephone," where students pass information to each other, emphasizing the importance of clear communication; "Filled Boxes," where students work with boxes containing mysterious content; "Mystical Object," where they discuss and narrate about mysterious objects; "Running Dictation," which develops auditory memory; "Dramatization," where students recreate scenes based on real circumstances and/or events; "Project Work," where they develop their own projects; "Encrypted Images," where they decipher coded images; "Construct a Story," where they collectively create a plot; "Spontaneous Dialogues" and "Interviews," aiding language learning through free conversation; "Fill in the Blanks in the Narrative," fostering a creative approach to text, and so on [13].

Examine some of them in more detail. The "Riddle Solving" or "Mystery Objects" method (grades 1-4) is an excellent way for a short break of 1-2 minutes and involves posing questions and seeking answers. Answers can be given orally (grades 1-2) or written in a black box (grades 3-4).

The "Broken Telephone" method (grades 1-2) involves dividing primary education learners into two teams, which line up in two rows. The teacher whispers a word (grades 1-2) or a short sentence in the target language (grades 3-4) to the first group. Students pass this word or sentence one by one to the last member of the team. The team where the last player correctly names the original word or sentence wins. If both teams answer correctly, they both win. This method is not universally effective as its potential for developing creativity is limited by imagination and phonemic hearing ability.

In the "Filled Boxes" method (grades 1-2), the teacher divides primary education learners into two teams, which line up in rows. Each representative of the team is given two boxes with identical items (eraser, pencil, pen, stapler). Only the first learner sees how the teacher arranged the items. They return and pass the information to another learner, and so on down the line until it reaches the last learner, who must arrange the items as the first learner did. This is a great exercise for learning prepositions (over, under, near, beside), but it cannot be identified as the leading tool for personality development.

The "Mystical Object" technique (grades 1-2) involves the teacher verbally describing an object placed prominently in the classroom, and students must guess what it is, with the turn passing to whoever guesses correctly [14]. While this method contributes to the development of creativity among primary education learners, challenges arise in articulating the description of the object in English.

Next, analyse the possibilities of the interactive cooperative learning methodology for developing the creativity of primary school students. This methodology involves paired and group work organized in lessons for the acquisition and application of knowledge, skills, and abilities. They can be used immediately after the teacher introduces new material, at the beginning of a new lesson instead of questioning, on special lessons dedicated to applying knowledge, skills, and abilities, or as part of review and summarization lessons. The most common techniques of cooperative learning include reciprocal (variable) triads, "two-four-together," "carousel," etc [17].

In turn, the techniques of situational modelling and evaluation of discussion questions involve creating interesting non-traditional situations and setting clear tasks that primary school students must perform by demonstrating imagination, fantasy, and creative thinking, which are essentially components of creativity. However, it is quite complex to implement in the conditions of primary education.

The use of games in English language classes in primary school also contributes to the development of students' creativity. For children, playing primarily offers the opportunity to test themselves, feel their own personality, and become familiar with the role they will play in the future. The use of music and didactic games contributes to the processing of audio recordings in a foreign language and expands the scope of language practice. Using games - dramatization during English language lessons allows primary education learners to learn important words and phrases, practice intonation, and develop metaphors and expressive language. It not only promotes learning but also makes the process of learning a foreign language interesting and creative, creates an opportunity to create a friendly atmosphere, and prevents fatigue. The game element can be introduced into any activity during English language lessons, making even those lessons that may seem boring more interesting through this creative form.

The use of teaching aids (films, TV programs, recordings, etc.) to develop the creative abilities of primary education learners enriches the methodology of teaching English and enables the development of new teaching methods and technologies that attract novelty and freshness, expand opportunities, establish links between language courses and other disciplines. While watching a film or TV show, primary education learners receive emotional support, which directly affects the quality of creative writing, as it stimulates the linguistic process.

Furthermore, it is worthwhile to note that the form of group learning aimed at increasing the activity of primary education learners in the process of acquiring knowledge requires the introduction and discussion of new active and creative teaching methods. Stimulating the development of creativity begins with creating a favourable emotional atmosphere, where criticism of the child is abandoned, encouraging the expression of original ideas, and providing examples of using creative approaches to problem-solving.

Analysing the typical educational programs of O. Savchenko and R. Shyian, we concluded that none of them clearly defines the list of methods and means for the systematic development of creativity in primary school students in English language lessons. After analysing the most common methods, techniques, and tools, we can state that although they are effective, none of them individually ensures the effective development of creativity among primary education learners in English language lessons. Therefore, it is appropriate to assume that they should be used according to a certain algorithm or conditions of organizing the educational process. The next step will be to consider the concept of collaborative learning and its peculiarities in primary school.

It is worth noting that collaborative learning ("collaborative" – common, combined, joint) is considered a consensus, as it is something that people construct through communication. This strategy is based on the concept of knowledge management.

Collaboration emphasizes teamwork. Collaborative learning is based on consensus, which is formed based on the cooperation of group members as opposed to the competitive principle characteristic of traditional pedagogy. Collaborative learning emerged in Britain, particularly based on the work of English educators who explored ways to assist learners by increasing their activity in learning (Gilles, Adrian - 2003).

Johnson and Johnson published five elements (1994), (positive interdependence, individual accountability, face-to-face interaction, social skills, as well as processing of information) necessary for effective group learning, achieving the highest levels of social, personal, and cognitive skills (e.g., problem-solving skills, reasoning, decision-making, planning, organization).

Collaborative learning develops and coordinates various skills and combines them into competencies. The formation of competencies is associated with participation in problem-solving and

joint commitments. Competencies need to be cultivated, and knowledge is lost if not used. Therefore, knowledge as a process of expanding possibilities is a strategic asset.

Collaborative learning integrates knowledge, creating situations of "natural learning", which differs from the outcome of learning in a highly structured situation. In this process, a collective effect emerges, where participants actively interact, creating their own learning situation and integrating their knowledge and competencies.

Collaborative learning, also known as "cooperative learning," serves as a tool for innovative and creative improvement of the educational environment, promoting self-development, self-improvement, and self-realization of the individual. This approach is defined as the joint organization of learning, where primary education learners with different abilities and interests cooperate in small groups to complete a project or solve a problem.

Among the main and appropriate forms and methods of collaborative learning, it is worth mentioning the roundtable, focus list, surveys and questionnaires, role-playing games, problem-solving situations, Jigsaw puzzle, visual thinking, intermittent learning, flexible Fridays, on-site learning, and others.

Collaborative learning strategies include models of the dynamics of knowledge creation processes. Human knowledge expands through social interaction between tacit and explicit forms of knowledge. This interaction is called "Knowledge Conversion". Explicit and tacit forms of knowledge do not differ so much. They interact and transition from one form to another in the process of human creative activity. Thus, the educational process stimulates the development of creativity [15].

Let's draw on the opinion of the authors of the textbook "Educational Technologies and Teaching Strategies" [25], who note that the educational process is holistic but consists of several subprocesses: the transition from tacit knowledge to tacit knowledge – socialization – the process of sharing experience during which such tacit knowledge as mental models and technical skills are formed; the transition from tacit knowledge to explicit knowledge or externalization – the process of forming knowledge, during which tacit knowledge becomes explicit, taking the form of metaphors, analogies, principles, hypotheses, or models, their combinations; the transition from explicit knowledge to explicit knowledge or combination, which includes the integration of various fragments of explicit knowledge; the transition from explicit knowledge to tacit knowledge or absorption (internalization), which is the process of incorporating explicit knowledge into tacit knowledge, closely related to "learning in the process".

These subprocesses are stages of the educational process, so it is not possible to talk about an algorithm or technology of collaborative learning. However, such an understanding of the essence and structure of the educational strategy sets the format of collaborative learning, such as group

projects, joint developments, online interaction, and so on. At first glance, training also falls under the definition of collaborative learning, as it involves close interaction between subjects, but the difference lies in the duration of the learning: collaborative learning is more prolonged, with participants having continuous access to communication with each other and the teacher.

The foundation of project-based learning is based on the ideas of J. Dewey, V. Laya, L. Thorndike, and other American scholars. The motto of the founders of the system is "Everything from life, everything for life". Therefore, the project method initially involves using real-life situations as a laboratory for the learning process [13].

From this perspective, the purpose of project-based learning is most often viewed through the creation of conditions in which learners: independently and eagerly acquire missing knowledge from various sources; learn to use acquired knowledge to solve cognitive and practical tasks; acquire communicative skills by working in various groups; develop their research skills (ability to identify problems, gather information, observe, conduct experiments, analyze, formulate hypotheses, generalize); develop systemic thinking. The main ideas of project-based learning are as follows: activity that is freely and independently chosen and carried out with great enthusiasm; project work is based on the material being studied but goes beyond its boundaries; the educational process is built not in the logic of the subject being studied but in the logic of the activity that has personal meaning for the learners, which enhances their learning motivation; deep, conscious mastery of basic knowledge is ensured by their universal use in various situations; project-based learning is never one-sided, and the important and incidental information obtained during project development.

Next, let's consider a series of techniques proposed by S. Kagan as one of the forms of organizing collaborative learning:

"Think-Pair-Share" The technique involves students first thinking about the given problem individually, seeking solutions, jotting down thoughts, or simply contemplating them. After a designated time, pairs of learners (usually with a neighbour at the same table) express their thoughts and then listen to their partner's thoughts. After individual discussions, the teacher asks them to formulate answers together [13]. However, although the technique is effective, it has its drawbacks in terms of teaching English language, as it is difficult for elementary school learners to express their thoughts in English, and not everyone succeeds.

"Zigzag" Learners are simultaneously members of two groups: the home group (usually a group of neighbors) and the expert group (working on one aspect of the topic being studied). While working in the expert group, they must independently familiarize themselves with new material and then discuss it with group members. Before completing the discussion in the group, each participant must prepare a comprehensive and logically structured narrative. They will use this narrative when returning to their home group, where they will also pose questions to ensure understanding of the

material for other participants. After returning to the home groups, each participant shares what they learned in the expert group with their partners and also asks questions for understanding and clarification of unclear points. This approach is used for all participants of the home group who are "experts" in different aspects or sections of the topic. As a result, all members of the home group receive a complete and reprocessed amount of information on the topic [12].

Another effective technique of collaborative learning is "Zigzag 2", developed by R. Slavin [12]. This is a modification of the previous technique, in which the teacher gives the entire audience a general task and prepares expert sheets with questions and problems related to this task. After reading the entire text, learners receive a number in their "home group," and according to the received number, they disperse into "expert groups" to prepare a certain part of the material and then present it to the home group. Essentially, they prepare to discuss the questions and problems indicated on the expert sheets with teammates. Upon returning to their home groups, they thoroughly dissect everything. It is important that it is not a retelling of what was read but rather an analysis. Looking at this technique through the prism of teaching English in elementary school, it allows the English teacher to involve the entire class in the work and helps to jointly master the educational material.

The technique of "Reverse Zigzag" was devised by T. Hedeen (2004). The class poses questions for clarification and explanation to the expert group. It differs from the original in that the discussion participant presents the reviewed class material, rather than returning to their home group. The expert group, through questions, assesses the extent of the class's assimilation of the material. However, its implementation in the first cycle of elementary school education is rather challenging.

The technique of "Reciprocal Teaching" was developed by Brown & Paliscar. It is a collaborative method of assimilating material that allows elementary education learners to engage in paired discussions about the material they are studying. Partners take turns explaining the material and asking each other questions for immediate feedback. This interaction allows learners to use important thinking skills such as metacognitive interpretation, doubts, predictions, and systematization. The authors believe that learners can effectively teach each other in this way [17]. This technique is effective because it teaches learners to work in teams and quickly grasp a large amount of material, thus, it can be assumed that it will be effective for teaching elementary school English learners.

The "Round Table" [17] technique divides the class into groups of 5 individuals. Each group member has a blank sheet of paper in front of them. Participants choose one aspect of the topic they are studying to describe (e.g., healthy lifestyle). Each participant writes 1-2 sentences expressing their thoughts on the chosen aspect. After writing their own propositions, the participant passes their sheet to another group member clockwise. The next participant reads what has been written (and can clarify unknown points to them), adds their technological aspect thoughts on the topic, and passes the sheet

to another participant clockwise. The third participant continues the text, focusing on the practical application of the previously described. Then the sheet is passed clockwise again. The fourth participant continues writing, focusing on the positives of the chosen aspect. The fifth participant focuses on the negatives of this aspect. Thus, after the sheet "circulates" the circle, there will be at least five propositions recorded on it, concentrating the understanding of the analysed aspect of the chosen topic. At the end, the "thesaurus" pages are read aloud to the whole class, who can suggest additions to the description. All pages are collected into a book (lapbook) that remains with the group. Although this technique is effective for fostering creativity in classroom application, its use in an English language class is somewhat challenging for elementary education learners because it is time-consuming and involves many participants, making it less versatile.

Brown & Ciuffetelli (2009), refining the 5 elements proposed by Johnson and Johnson, identified 4 fundamental and necessary elements for cooperative learning [23]. They are as follows:

- 1. Positive interdependence: Students must actively collaborate and exert effort to achieve group goals. Each participant has their own task, role, or responsibility and understands that their contribution affects the effectiveness of the group's work.
- 2. Face-to-face interaction: Participants contribute to each other's success by helping with material assimilation and task completion.
- 3. Social skills: Successful collective learning requires the improvement of interpersonal and group interaction skills, the development of effective communication methods.
- 4. Group assessment: Often, during collaborative learning, groups must assess their effectiveness and decide how to improve it. To significantly improve the achievements of elementary education learners, two characteristics must be present: each person works towards the group's goal, and success depends on the result of each individual. Personal contribution and responsibility are taken into account during assessment and encouragement.

When analysing the collaborative learning strategy, it's important to mention the special role and function of the teacher, who, within this approach, takes on the role of group work facilitator or moderator.

The term "moderation" comes from the Italian "moderare" and means "to moderate", "to restrain", "moderation", or "restraint" [12]. In contemporary understanding, moderation is the ability to organize cooperation in such a way that group work becomes more purposeful and structured. Moderation is based on the use of techniques that help organize group work and guide students in decision-making to realize the potential of the group as a whole and each of its participants. Moderate procedural aspects involve compliance with a number of criteria: the number of students in the combined educational group should range from 4 to 12; the moderator should maintain a neutral

position; rooms should allow participants to move freely while providing quality visual materials (presentations, whiteboards, active chat, etc.); feedback should be received from the group.

It should be noted that participants in collaborative learning must have a clear understanding of the purpose of the activity proposed by the moderator to avoid misconceptions that the moderator manipulates the group's behavior. In the process of organizing cooperative learning, the facilitator plays the role of a "catalyst" for group communication.

The basic structure of moderation includes the following components: idea gathering, prioritization, project work, and action plan formulation.

In this context, the following invariant technological stages can be identified:

- 1. Initial stage involves organizing moderation participants' interaction, familiarization, aligning expectations, establishing group work rules, and developing a work schedule.
- 2. Formation of small groups and their work stage includes problem setting, discussion, group decision-making, and presentation of small group work results.
 - 3. General discussion. Summarizing.
 - 4. Reflection [24].

Next, let's consider in more detail moderation tools that are relevant for elementary school teachers in English language lessons. Among them:

Brainstorming - is a primary method of moderating group work. Brainstorming allows quickly describing and imagining prerequisites for the elaboration and further development of significant ideas. During brainstorming, there is joint identification and prioritization, and the result provides an opportunity for preparing and conducting further meeting steps.

Brainstorming variations:

- 1. Rotation method. Instruction: Express ideas in turn. If there are no ideas, say "pass". Each participant presents one idea. Elaboration of the idea is not necessary. The group selects and presents 2-3 most successful ideas.
- 2. Free-form method. Instruction: Ideas can be expressed without waiting in line. You can develop a neighbor's idea. The group selects and presents 2-3 most successful ideas.
- 3. Writing down one's own ideas method. Instruction: In complete silence for 3 minutes, each group participant writes down their own ideas. Then for 5 minutes, discuss them with the group. The group selects and presents 2-3 most successful ideas.
- 4. Generating "crazy" ideas method. Instruction: Ideas can be expressed using any of the previous methods, the main thing is that it should be extraordinary. The group selects and presents 2-3 most successful ideas [24].

In summary, this method is effective in that each student has the opportunity to express their opinion, but it has its drawback - passive students do not always participate and only active children work.

According to the "Delbecq Method":

- 1. Group members independently describe the factual situation with short sentences (maximum necessary time 15 minutes).
- 2. Moderators, using question-and-answer methods, correct errors and inaccuracies in the formulations of team members, record proposals (board, paper, screen), with the number corresponding to the number of team members. The moderator asks, "How many people wrote the same proposal?" and records the number of identical sentences. The moderator repeats the above process until the number of unconsidered proposals decreases to zero or to a minimum.
- 3. The moderator synthesizes sentences expressing the collective thoughts, thereby determining the actual formed situation.
 - 4. Group members describe the desired (achievable) state of affairs.
- 5. After reading the written material, students discuss the information received for about 20 minutes to prepare for choosing the proposal that most accurately reflects what can be achieved. Each participant's speaking time is limited and equal.
- 6. After the discussion, each group member writes down three proposals, ranking them by importance level. The achievable goal becomes the proposal with which the majority of participants agree (determined by compiling a preference matrix or simple voting).
- 7. Through written registration of ideas, brainstorming, and voting, compile a list of factors that stand in the way of achieving goals. The identified factors contribute to achieving the set goals. A plan for implementing the proposal has been developed [24].

The aims of the "6-3-5 Technique" method to regulate team work as follows: a group of 6 people is formed, each of whom must, within 5 minutes, present 3 proposals or hypotheses regarding a certain aspect of the task being addressed [24].

Each of the 6 participants is given a task card (blank) on which they must write down 3 different ideas for solving the problem within 5 minutes. Then there is a rotation of cards in a circle: the second participant receives the card of the first, the third - the second... the first - the sixth participant. Now the "search" participants have 6 minutes to develop the ideas of the previous student. Again, there is a rotation of cards in a circle. This time, an additional minute is given for further idea development, making it 7 minutes. Then 8 minutes... Then 9 minutes... Then 10 minutes... At the end of the "search," the cards return to the hands of those who started filling them out, and they can further develop the solutions with the help of the added notes. This rotation in a circle concludes, the cards are collected by the moderators, and the obtained ideas are analyzed. The "search" moderator must

ensure the correctness of the exchange of blank cards and the time of their completion. The total search time is about 45 minutes. A positive practice of this method is that it can involve all students, but it takes a lot of time in the lesson and does not provide an opportunity to work with a small group of students.

Next, let's examine the "Card Survey" method. Participants are asked a question, to which they respond on cards displayed on the board. Card surveying serves to gather ideas, information, problems, and expectations. Each card presents only one statement, which should be clear and legible. Some types of statements may be associated with a specific colour of card (critique - red, problem - white, fantasy, idea - yellow, etc.). A fixed time is allocated for filling out the cards. At the moment of card completion, the moderator should avoid explanations and comments from group participants. This method teaches students to find alternative solutions to problems but requires joint organization.

Lastly, let's analyse the "Hot Seat" method. All students sit on the outer side of a circle. Inside the circle are 4-5 chairs. These chairs are occupied by participants who initiate the conversation. At the same time, there is another chair, which is free - the "hot seat". The participants' conversation is related to solving a particular problem, but only members of the nearest circle can speak. People from the outer circle can also join the conversation if they move from the outer to the inner circle and take the "hot seat." At this time, one of the participants must leave the inner circle and move to the outer, thereby vacating their seat and becoming the "hot seat". The reasons for this shift may include a lack of arguments in the conversation, delegating participation in the conversation to another person, fatigue from communication, etc [11]. This method is suitable for 3-4 grade students but ineffective for 1-2 graders as it requires not only proper knowledge to lead a dialogue and discussion but also developed teamwork skills.

It is worth noting that collaborative learning has recently been reinterpreted in the context of electronic (distance) learning (computer-supported collaborative learning). In this sense, collaborative learning involves the use of web services (forums, blogs, social networks, etc.).

Therefore, having explored the concept of collaborative learning and its toolkit, we can conclude that such a form of organizing the educational process should contribute to the development of creativity among elementary education students in English lessons, provided that its methods and means are selected appropriately.

Thus, let's further examine the theoretical foundations of developing the model of elementary education students in English lessons through collaborative learning methods.

Development and innovation have driven society in general, and scholars in particular, to seek the best educational system to meet their growing needs. For this purpose, modeling is used in pedagogy. Modelling is a specific method of learning, the result of which is the creation of a model of the research object as an integrated system with new qualitative and quantitative characteristics. A model, in turn, is a representation of an object. Depending on the field of modeling and its purpose, a model can be: educational, informational, diagnostic, instructional, psychological, managerial, or technological. Models can be categorized into three main types based on their form of expression: conceptual models, material models, and symbolic models [20].

Narrowing this concept to an educational model, it can be defined as a system of interrelated parameters that reflect the content of the learners' educational and cognitive activities and the organization of the pedagogical process as a whole [3].

There are various ways to classify educational models, taking into account the nature of activities and the individual characteristics and abilities of learners. The most commonly used types include [3]:

- Selection-process model, which is based on the assertion that forming groups of learners can occur according to the principle of homogeneity of intellectual abilities;
- *Task-oriented model*, which organizes the educational process with a defined goal, objectives, and program;
- *Mixed-abilities model*, which is built considering the differentiation of learners' cognitive abilities into mathematical, artistic-aesthetic, promoting the grouping of learners with different intellectual abilities;
 - *Integration model*, aimed at the harmonious development of the individual;
- *Innovative educational model*, constructed according to the concept of self-development, which involves the learner in goal setting and decision making.

In accordance with the theme of our research, it is pertinent to examine the scholarly contributions of Harvard professor T. Amabile [11], who developed a model of creativity based on the interaction of three components [11]:

- 1. Domain-related skills: These encompass knowledge in a specific area, technical skills, and talents within a particular domain.
- 2. Creativity-related skills: These include a working style of thinking, heuristics for generating new ideas, and personal characteristics.
- 3. Motivation: This refers to the desire to undertake a task out of personal initiative or interest in a specific activity at a given time. T. Amabile [11] emphasizes the importance of intrinsic motivation, which arises as a response to the inherent properties of the task at hand.

In turn, B. Komar [3] notes that a rationally constructed educational model typically comprises three main components: orientational, executive, and control. The orientational component section should outline general approaches to defining objectives and specify the key initial positions on which

the subsequent program of task execution is based. The executive component elucidates the methods of organizing the educational process aimed at solving tasks and illustrates the pathways for problem-solving. The control component of the model is designed to assess the degree of alignment of all preceding transformations of information with the initial framework.

Based on our analysis and synthesis of the presented models, our educational model for developing the creativity of primary education learners in English lessons through collaborative learning consists of three components: organizational, formative, and control-resultative.

The organizational component includes designing conditions for preparing primary education learners to develop creative abilities. Implementing this stage involves developing the goals, objectives, and content of the educational process in English lessons aimed at fostering creativity among primary education learners.

The formative component describes the methodology for implementing the conditions for preparing primary education learners to develop creativity. It also identifies the methods (project method, brainstorming, "Delphi method", "6-3-5 technique", card survey, "Hot Seat method") and means (collaborative learning) for developing creativity among elementary education learners in English lessons.

The control-resultative component involves monitoring the level of creativity development among primary education learners in English lessons. It includes criteria, indicators, and expected outcomes for the model's implementation. Conducting a final monitoring within the experimental work process provides objective data on the effectiveness of our proposed model, allows for adjustments, and achieves the planned outcome (Fig.1).

Let us examine each component in detail. In the organizational stage, the goals, objectives, and content for the development of creativity among elementary education learners in English lessons through collaborative learning were determined.

The goal is to develop the creativity of elementary education learners in English lessons through collaborative learning, which also illustrates the ultimate expected outcome of the model's implementation.

The tasks for developing creativity among elementary education learners in English lessons through collaborative learning included: developing the ability to create something new based on acquired knowledge; finding alternative solutions to problems; and encouraging creative searching and problem-solving.

Based on the goals and objectives, the content for developing the creativity of elementary education learners in English lessons through collaborative learning was determined. This involved selecting didactic materials according to the curriculum and diagnostic results, aimed at fostering creativity among primary education learners in English lessons.

The formative stage involved selecting methods, means, and techniques for working with primary school students. The methods for implementing collaborative learning to ensure the realization of the model's components were identified as: project method, brainstorming, "Delphi method", "6-3-5 technique", card survey, and "Hot Seat method". For instance, during English lessons, the brainstorming method is effective for learning new vocabulary (especially during the material consolidation stage) and developing communication skills. In the foreign language course, we aimed to use project methodology elements for almost any lesson topic, as the choice of topics considers their practical significance for the learners. The essence of the Delphi method in English lessons is that through sequential actions—surveys, brainstorming sessions, interviews—a maximally unified agreed-upon result can be achieved in addressing a specific issue. This method stimulates the cognitive activity of primary education learners in English lessons. It is clear that the means of implementing these methods is collaborative learning, specifically its organization for teaching primary education learners.

In accordance with the identified methods and means, we selected techniques for their application. These include: interactive learning; cooperative; collective-group; situational modeling and problem questions.

The control-resultative stage included criteria and indicators for the development of creativity among elementary education learners (speed of thought, flexibility of thought, originality, accuracy), as well as the expected outcomes of the model's implementation, which is the direct development of creativity among primary education learners.

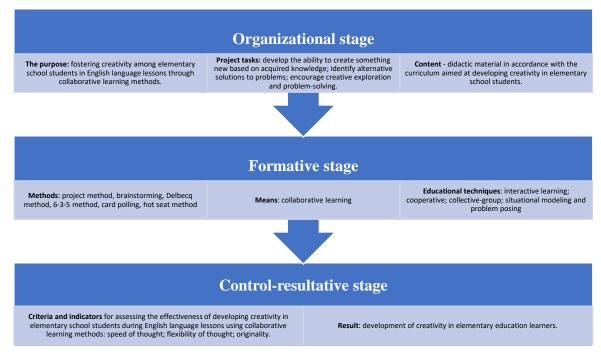


Fig. 1. Model for Developing Creativity in Primary Education Learners during English Lessons through Collaborative Learning

It should be noted that the model we developed exhibits signs of universality and can be applied to various areas of primary education. However, given the diverse methods and means of instruction defined, and the primary method identified – collaborative learning – the base for implementing the proposed model is English language lessons. Additionally, it is important to mention that the sequence of structural components presented in the model is conditional, and effectiveness is achieved only through their comprehensive implementation.

To summarize, the theoretical foundations for developing creativity in elementary education learners during English lessons through collaborative learning have been considered. The development of creativity in elementary education learners has been analysed as a pedagogical problem, with most authors advocating for understanding creativity not only from the results or products obtained but also from the process by which they are achieved. In analysing the concept of creativity among elementary education learners, the term "creativity of primary education learners" has been clarified as the ability of primary education learners to find non-standard solutions and create new products based on existing general and educational competencies while performing various tasks in the primary school educational process. The generalization of analysis results from various sources has identified the components of learner creativity (creative thinking, creative imagination, creative literacy) and the pedagogical conditions conducive to the development of creativity in primary education learners (internal and external).

In examining the concept of collaborative learning and its application in primary school, it has been established that collaborative learning integrates knowledge, creating situations of "natural learning", which differs from the outcomes of learning in a highly structured situation. This process generates a sense of community, where participants actively interact, creating their own educational situations and integrating their knowledge and competencies. Such an understanding of the essence and structure of educational strategy sets the format for collaborative learning, including group projects, joint developments, and network interaction. By exploring the concept of collaborative learning and its tools, we concluded that this form of organizing the educational process should promote the development of creativity in elementary education learners during English lessons.

We have identified the theoretical foundations of a model for developing creativity in elementary education learners during English lessons through collaborative learning, which includes three components. The organizational component involves designing the conditions for preparing elementary education learners to develop creative abilities. The formative component describes the methodology for implementing the conditions for preparing elementary education learners to develop creativity and specifies methods (project method, brainstorming, Delphi method, 6-3-5 technique, card polling, hot seat method), means (collaborative learning), and techniques (interactive learning; cooperative; collective-group; situational modeling and problem questions) for developing creativity

in elementary education learners during English lessons. The evaluative component involves monitoring the level of creativity development in elementary education learners during English lessons and includes criteria, indicators (speed of thought, flexibility of thought, originality, accuracy), and expected outcomes of the model implementation.

In the course of developing the proposed model, we hypothesized that the effectiveness of the model would increase by adhering to certain pedagogical conditions. These conditions include creating a conducive learning atmosphere, following the algorithm of productive activity, properly organized social environment, fostering independence, among others, which will serve as the prospects for our further research.

REFERENCES:

- 1. Antonova O. Ye. (2012) Do problemy vyznachennia sutnosti poniattia kreatyvnosti: problemy ta poshuky. *Novi tekhnolohii navchannia*: nauk.-metod, zb. Instytutu innovatsiinykh tekhnolohii i zmistu osvity Ministerstva osvity i nauky, molodi ta sportu Ukrainy, Akademii mizhnarodnoho spivrobitnytstva z kreatyvnoi pedahohiky. Kyiv-Vinnytsia, V. 71. S. 8-15 [in Ukrainian].
- 2. Bekh I.I. (2015) Molodshyi shkoliar u vikovykh zakonomirnostiakh *Pochatkova shkola*, № 1. S. 10-13 [in Ukrainian].
- 3. Bykov V.Iu. (2008) Modeli orhanizatsiinykh system vidkrytoi osvity: monohrafiia. Kyiv: Atika, 684 s [in Ukrainian].
- 4. Bychkivska T.M. Vykorystannia interaktyvnykh metodiv navchannia u protsesi formuvannia komunikatyvnoi kompetentnosti uchni na urokakh anhliiskoi movy. *Naukovyi Bloh*. URL: https://naub.oa.edu.ua/2017/vykorystannia interaktyvnykh metodiv [in Ukrainian].
- 5. Bochkovska O.V. (2010) Vyvchennia inozemnoi movy v rannomu shkilnomu vitsi *Ihry v* pochatkovii shkoli na urokakh anhliiskoi / uporiad. L. Mudryk. Kyiv: Shk. svit,128 s [in Ukrainian].
- 6. Bushtruk O.L. (2021) Interaktyvni metody navchannia u pochatkovii shkoli. *Aktualni pytannia humanitarnykh nauk*. Vyp. 38, tom 1, S. 153-158 [in Ukrainian].
- 7. Vyshnevskyi O.I. (2011) Metodyka navchannia inozemnykh mov: navch. posib. K.: Znannia, 206 s [in Ukrainian].
- 8. Vorobiova T.V. (2014) Formuvannia kreatyvnykh zdibnostei molodshykh shkoliariv u protsesi rozviazannia navchalnykh zavdan: avtoref. ... kand. ped. nauk: 13.00.09. Ternopil, 19 s [in Ukrainian].

- 9. Havrylenko T. L. (2013), Sukhomlynskyi V. O pro formuvannia tvorchoi osobystosti molodshoho shkoliara. Naukovi zapysky. Seriia: Pedahohichni nauky. Kirovohrad. derzh. ped. un-t im. Volodymyra Vynnychenka. Kirovohrad, Vyp. 123, T. 1. S. 133-136.
- 10. Hatanov Yu.B. (2006) (Za metodykoiu Dzh Hilforda i Dzh. Renzully) Kurs rozvytku tvorchoho myslennia: Pershyi rik navchannia (dlia ditei 6-10 rokiv). SPb: DP «Imaton», 84 s [in Ukrainian].
- 11. Hospodynchyk T. (2014) Vykorystannia audiovizualnykh materialiv yak zasobu stvorennia inshomovnoho seredovyshcha na urokakh inozemnoi movy. *Nova pedahohichna dumka*. № 4. S. 55-58 [in Ukrainian].
- 12. Interaktyvni tekhnolohii navchannia u pochatkovykh klasakh (2013) / avt.-upor. I. I. Divakova. Ternopil : Mandrivets, 180 s [in Ukrainian].
- 13. Kozhushko S. (2014) Stratehii kolaboratyvnoho navchannia u vyshchomu navchalnomu zakladi *Molod i rynok*, № 5. S. 65-71. URL: http://nbuv.gov.ua/UJRN/Mir_2014_5_16. [in Ukrainian].
- 14. Kress, U., Kimmerl, Dzh. (2008) Systemnyi i kohnityvnyi pohliad na spilne formuvannia znan za dopomohoiu viki. *International Journal of Computer-Supported Collaborative Learning*, 3. S. 105 –122 [in Ukrainian].
- 15. Lyza H.V. Osoblyvosti vykorystannia interaktyvnykh tekhnolohii na urokakh anhliiskoi movy [Elektronnyi resurs] URL: https://vseosvita.ua/library/osoblivostivikoristanna-interaktivnih-tehnologij-na-urokah-anglijskoi-movi-90918.html [in Ukrainian].
- 16. Milova O. Ye (2010). Suchasni formy ta metody aktyvnoho navchannia v shkilnii praktytsi *Visnyk Luhanskoho natsionalnoho universytetu imeni Tarasa Shevchenka (filolohichni nauky)*. Naukove vydannia, № 14 (201). S. 112-119 [in Ukrainian].
- 17. Nisimchuk A.S., Padalka O.S., Shpak O.T. (2016) Suchasni pedahohichni tekhnolohii. K, S.363-365 [in Ukrainian].
- 18. Nova ukrainska shkola: kontseptualni zasady reformuvannia serednoi shkoly (2016) K.: MON, 38 s. URL: https://base.kristti.com.ua/?p=1129 [in Ukrainian].
- 19. Pavlenko V.V. (2015) Kreatyvnist uchytelia yak chynnyk rozvytku pedahohichnoi tvorchosti Formuvannia dydaktychnoi kompetentnosti pedahohiv doshkilnoi ta pochatkovoi osvity: zbirnyk naukovo-metodychnykh prats / za zah. red. V.Ie. Lytnova, N.Ie. Kolesnyk, T.V. Naumchuk. Zhytomyr: Vyd-vo ZhDU im. I.Franka, S. 145–150 [in Ukrainian].
- 20. Tereshchuk A. Kreatyvnist yak nevidiemnyi komponent intelektualnoho rozvytku osobystosti [Elektronnyi resurs].- Rezhym dostupu: http://www.newacropolis.org.ua/ua/study/conference/?thesis=4254 [in Ukrainian].

- 21. Typova osvitnia prohrama dlia 1-4 klasiv rozroblena pid kerivnytstvom Savchenko O.Ia. (2022) [Elektronnyi resurs].- Rezhym dostupu: https://mon.gov.ua/storage/app/media/zagalna%20serednya/programy-1-4-klas/2022/08/15/Typova.osvitnya.prohrama.1-4/Typova.osvitnya.prohrama.1-2.Savchenko.pdf [in Ukrainian].
- 22. Typova osvitnia prohrama dlia 1-4 klasiv, rozroblena pid kerivnytstvom Shyiana R. B. (2022) [Elektronnyi resurs].- Rezhym dostupu: https://mon.gov.ua/storage/app/media/zagalna%20serednya/programy-1-4-klas/2022/08/15/Typova.osvitnya.prohrama.1-4/Typova.osvitnya.prohrama.1-2.Shyyan.pdf [in Ukrainian].
- 23. Chapiuk Yu. S. (2017) Ihry-vpravy yak zasib rozvytku kreatyvnoho myslennia molodshykh shkoliariv na urokakh anhliiskoi movy *Naukovyi visnyk Izmailskoho derzhavnoho humanitarnoho universytetu*, Vyp. 36. S. 251-255. Rezhym dostupu: http://nbuv.gov.ua/UJRN/Nvidgu 2017_36_50 [in Ukrainian].
- 24. Richards, J. C. and Rodgers, T. (2015). Approaches and Methods in Language Teaching. Cambridge: Cambridge University Press. 3rd edition 204 p.
- 25. Srinivas H. Collaborative Learning. Collaborative Learning Structures and Techniques. Texas: Teaching Resource Center. URL: http://www.gdrc.org/kmgmt/c-learn/methods.html.

TECHNOLOGY FOR NURTURING THE INTELLECTUALLY GIFTED STUDENT YOUTH IN THE OUT-OF-SCHOOL EDUCATION INSTITUTIONS

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Summary

The article theoretically substantiates the technology for nurturing the intellectually gifted student youth in the out-of-school education institutions, which envisages the sequential implementation of a number of steps in the normative-legal, diagnostic, scientific-methodological, psychological-pedagogical, motivational and staff directions during four stages.

The first (search-analytical) stage is focused on identifying problems, opportunities and prospects of educational work with intellectually gifted student youth in an out-of-school education institution. The second (diagnostic) stage is aimed at identifying intellectually gifted student youth among the students of an out-of-school education institution. The third (implementation) stage involves the actual implementation of the proposed technology in an out-of-school education institution. The fourth (summarizing and presentation) stage involves the analysis of the results of educational work with intellectually gifted student youth in an out-of-school education institution.

Key words: giftedness, intellectual giftedness, intellectually gifted student youth, out-of-school education institutions, technology.

Introduction

The change in the social development paradigm determines the social order for a versatile personality with high intellectual and creative potential. In this regard, actualize the problems of identification and development of gifted children and youth – an important resource for the progressive restructuring of society. In the conditions of the transformations of the education system in Ukraine, the quality of education is determined, first of all, by the opportunities and conditions that education institutions provide for their students, in particular gifted students, who feel an acute need for support and stimulation of their development from the education system.

The development of abilities and revealing the potential of gifted children and youth is a priority of the national educational policy of our state, declared in a number of regulatory documents, primarily the Laws of Ukraine "On Education", "On General Secondary Education", "On Out-of-school Education", the concept of "New Ukrainian School", etc. In particular, the concept of "New Ukrainian School" states that in modern conditions for the development of the Ukrainian economy, the state needs educated Ukrainians, comprehensively developed, responsible citizens and patriots

capable of taking risks and innovations. In this regard, the institution of out-of-school education has all the necessary capacity to achieve the declared goal.

The indicated problem requires solving a number of contradictions between:

- the need to provide pedagogical support for intellectually gifted student youth in out-of-school education institutions and its real state;
- social and personal needs in creating a favorable environment for active self-development, self-realization of intellectually gifted student youth and insufficient development of mechanisms for its creation in the out-of-school education institutions;
- awareness of intellectually gifted student youth of their own capabilities and the real conditions for their realization in the educational process of a modern out-of-school education institution.

Given the above mentioned, the **purpose of our study** was to develop and theoretically substantiate the technology for nurturing intellectually gifted student youth in the out-of-school education institutions.

Research results

In order to increase the effectiveness of the process of educating intellectually gifted students in out-of-school education institutions, we have proposed the technology aimed at creating conditions for the identification, support and nurturing of the intellectually gifted student youth, their self-realization in accordance with their abilities and individual characteristics.

Implementation of the proposed technology in the out-of-school education institution involves solving a number of tasks, namely:

- identification of intellectually gifted student youth among peers;
- creation of conditions for the disclosure of their intellectual and creative potential;
- compilation of a data bank of gifted student youth of the out-of-school education institutions with a high level of development of specific (academic) abilities and motivation;
- creation of conditions that contribute to the optimal development of gifted student youth with specific (academic) abilities;
- development of scientific and methodological support for the process of identification, upbringing and development of gifted students;
- psychological and pedagogical support of intellectually gifted student youth with a high level of abilities and motivation.

The technology for nurturing intellectually gifted student youth in the out-of-school education institutions involves the implementation of successive steps in the following main directions:

- normative-legal;
- diagnostic;

- scientific-methodological;
- psychological-pedagogical;
- motivational;
- staff.

Below we will consider each of the highlighted directions in more detail.

- 1. The normative-legal direction provides for:
- implementation of state policy in the field of out-of-school education within the framework of implementation of the provisions of the Law of Ukraine "On Out-of-School Education" regarding the need to identify and develop the talents and abilities of gifted student youth;
- formation of a regulatory and legal framework regarding educational work with intellectually gifted student youth in an out-of-school education institution;
 - control and analysis of activity;
 - observance of the child's rights;
 - social support of gifted student youth.

In this direction it should be mentioned that the Law of Ukraine "On Out-of-School Education" the main tasks of the out-of-school education sees in: "education of a citizen of Ukraine; free development of the personality and formation of his social and public experience; instilling in pupils, students and listeners respect for the Constitution of Ukraine, the rights and freedoms of a person and a citizen, a sense of self-worth, responsibility before the law for one's actions; education of pupils, students and listeners in patriotism, love for Ukraine, respect for folk customs, traditions, national values of the Ukrainian people, as well as other nations and peoples; fostering in pupils, students and listeners a respectful attitude towards family and the elderly; creation of conditions for creative, intellectual, spiritual and physical development of pupils, students and listeners; development of an inclusive educational environment in the out-of-school education institutions that are most accessible and closest to the place of residence of children, including children with special educational needs; acquisition of primary vocational skills and abilities by students and trainees, necessary for their socialization, further self-realization and/or professional activity; formation in pupils, students and listeners of the conscious and responsible attitude to their own health and the health of others, safe behavior skills; meeting the educational and cultural needs of pupils, students and listeners, which are not provided by other components of the education structure; meeting the needs of pupils, students and listeners in professional self-determination and creative self-realization; search, development and support of capable, gifted and talented pupils, students and listeners; improvement of physical development of pupils, students and trainees, preparation of sports reserve for national teams of Ukraine in various sports; organization of pupils' and students' leisure time, search for its new forms; prevention of neglect, offenses; educating the participants of the educational process in a conscious attitude to their own safety and the safety of others; formation of a healthy lifestyle of pupils, students and listeners; carrying out information-methodical and organizational-mass work" (*Law of Ukraine "On Out-of-School Education"*, 2021).

- 2. The diagnostic direction covers:
- identification of the outstanding intellectual abilities and intellectual giftedness of student youth;
- formation of a package of diagnostic methods taking into account the positive conceptual ideas of foreign experience;
 - replenishment of the existing national data bank "Gifted Children".
 - 3. The scientific-methodological direction includes:
- introduction of health-improving technologies, digital technologies, individualization and differentiation of educational services provided in the educational process of the out-of-school education institution, aimed at meeting the individual educational needs of intellectually gifted student youth, taking into account their inclinations, interests, and cognitive capabilities;
- provision of informational and scientific-methodological support to teachers of out-of-school education institutions and parents of intellectually gifted students;
- creation of conditions for practice and application of innovative education technologies in work with intellectually gifted student youth;
- approbation of scientific, psychological and pedagogical developments in the educational process of an out-of-school education institution;
- implementation of educational and development programs in work with intellectually gifted student youth;
- development of methodological materials for educators of the out-of-school education institution for improving their work with intellectually gifted student youth.
 - 4. The psychological-pedagogical direction provides for:
- measures of diagnostic, prognostic and psychological orientation to accompany intellectually gifted student youth in an out-of-school education institution;
- psychological-pedagogical counseling and social-pedagogical support of parents of the intellectually gifted students.
- 5. The motivational direction concerns the creation of conditions that contribute to the optimal development of intellectually gifted student youth in an out-of-school education institution.
- 6. The staff direction manifests itself in raising the level of education and qualification of OEI educators, which can be carried out through master's studies in the specialty "Out-of-school education", as well as pedagogical internships, including abroad.

It is an undeniable fact that one of the main subjects of the educational process, along with students, is the educator. An equally important role is played by the educator's personality in the organization of work with intellectually gifted student youth. In our opinion, the key to the success of the educational work of an educator of the out-of-school education institution is his system of views and beliefs, in which ideas about himself, other people, as well as the purpose and tasks of educational work play a significant role. As stated in our previous studies (Boichenko, 2018) and according to the scientists (Antonova, 2012; Sbruieva, 2013), the behavior of a teacher who works with gifted students should meet a number of characteristics:

- skills in developing flexible, individualized programs for educating intellectually gifted students:
 - ability to create a warm, emotionally safe atmosphere in classes;
 - feedback skills:
- knowledge and use of various strategies of educational work with intellectually gifted student youth;
 - respect for the individual, his values and individuality;
 - promoting the formation of positive self-esteem of the student;
 - skills of nurturing creativity and imagination in intellectually gifted student youth;
 - ability to stimulate the development of higher-level mental processes.

One of the most important characteristics of an educator who works with intellectually gifted student youth is motivation, a positive self-concept. A teacher with low self-esteem, as a rule, feels a sense of apprehension in front of his gifted students, and therefore cannot inspire respect in them. Among other important qualities of an OEI educator, one can highlight maturity, successful teaching experience, emotional stability, purposefulness, and creativity. Undoubtedly important is the professional competence of a teacher who works with intellectually gifted student youth, based on his personal readiness for continuous professional development and lifelong learning related to the field of his practical activity.

In addition to the competences and abilities outlined above, an OEI educator who works with intellectually gifted students has to:

- know the psychological characteristics of gifted students, take into account their needs and interests;
 - be friendly and sensitive;
- be able to build intellectual education in accordance with the results of the diagnostic examination of the student;

- be clearly aware of the purpose and task of education, have a large amount of knowledge and experience in the application of methods and strategies of work with intellectually gifted student youth;
 - be emotionally stable, have a good command of his own emotions and feelings;
- have a high level of intellectual development, a wide range of interests and skills, as well as a desire for constant self-improvement;
 - have a sense of humor;
- be ready to work with intellectually gifted student youth and acquire special knowledge in the field of giftedness;
 - show perseverance, purposefulness and seriousness;
 - stimulate students' cognitive abilities.

So, it is possible to single out a number of requirements for the educator of an out-of-school education institution who works with intellectually gifted student youth:

- availability of his/her own pedagogical concept;
- professional competence;
- high level of theoretical training in the specified field;
- scientific and methodological activity;
- high communicative culture;
- creativity;
- emotional stability, purposefulness, adequate self-esteem;
- ability to objectively assess the success of gifted students;
- knowledge of age psychology;
- striving for self-education and self-improvement;
- high level of knowledge in the field of professional interest;
- demandingness and ability to find an approach to non-standard students;
- high level of intellectual, moral and spiritual development, erudition;
- benevolence, sensitivity, pedagogical tact;
- organizational skills.

It should also be emphasized that organization of the education services and pedagogical support for intellectually gifted student youth in the out-of-school education institutions involves, first of all, meeting the following criteria by the teachers:

- a teacher who works with intellectually gifted student youth is a person who responds productively to a challenge, knows how to accept criticism and does not suffer from stress when working with people who show a higher level of abilities and knowledge than he personally. The interaction of the teacher of the out-of-school education institution with intellectually gifted student

youth should be oriented towards the optimal development of abilities, have the character of help, support, and be non-directive;

- a teacher who works with intellectually gifted student youth is aware of his own competence and ability to solve problems that arise in the educational process. He is ready to take responsibility for the decisions made and at the same time is confident in his pedagogical attractiveness and ability;
- a teacher who works with intellectually gifted students, believes that those around him are capable of solving their own problems independently believes in their friendliness and that they have positive intentions, their inherent sense of self-worth, which should be valued, respected and protected;
- a teacher who works with intellectually gifted student youth, strives for intellectual selfimprovement, willingly replenishes his own knowledge, is ready to learn from others, engage in selfeducation and self-development.

It should also be noted that the activity of a teacher of an out-of-school education institution, who works with intellectually gifted students, is a special type of pedagogical work and is characterized by the following features:

- organization of the educational process on the basis of free choice, non-compulsory;
- maximum meeting of personal interests and needs of intellectually gifted student youth;
- lack of strict control over the level of assimilation of educational material;
- the specificity of educational work in a team, which, by its very nature, is an informal association;
- increased responsibility of the educator of an out-of-school education institution for creating an atmosphere of cooperation, etc. (Voronina, 2010).

Therefore, in the innovative educational space of an out-of-school education institution, the professional and pedagogical competence of a teacher who works with intellectually gifted student youth should include the development of such functions as informational (to know), active (to be able), creative (to possess) and developmental (to be).

The specificity of the professional activity of a teacher of out-of-school education institution, who works with intellectually gifted students, requires the following special competences:

- competence in creating conditions for the individual development of the personality of an intellectually gifted student;
- competence in carrying out the compensatory function of out-of-school/extracurricular education in relation to general education;
- competence in the organization of developmental activities based on the interests, personal and age characteristics of intellectually gifted student youth, the use of a wide range of forms, active and interactive methods and technologies for organizing the educational process;

- competence in the ways of meeting creative and cognitive needs of intellectually gifted student youth, assisting in choosing their individual educational trajectory, creating a situation of success for each student;
 - competence in planning and forecasting the results of the educational process;
- competence in organizing educational activities of different age groups, organizing joint creative initiatives of children, teachers and parents;
- competence in identifying and developing the creative abilities of children and adolescents, observing positive changes in everyone compared to themselves, psychological and pedagogical support for gifted children and youth with deviant behavior.

Thus, summarizing the above, let's emphasize that a teacher of the out-of-school education institution, who works with intellectually gifted student youth, must meet the specified requirements, because he fulfills an important mission assigned to him by society – education of the future national elite.

Turning back to the proposed technology for nurturing intellectually gifted student youth in out-of-school education institutions note that its implementation should be carried out in the following stages:

- 1. Search-analytical stage focuses on identifying problems, opportunities and prospects of educational work with intellectually gifted student youth in an out-of-school education institution. This stage includes:
- study and analysis of domestic and foreign concepts that reveal the essence and nature of giftedness;
 - study of regulatory documentation (international, national, regional and institutional levels);
- identifying the state of readiness of teachers to work with intellectually gifted student youth in an out-of-school education institution;
- analysis of facilities, pedagogical conditions and possibilities of the out-of-school education institution for the implementation of the proposed technology.
- 2. *Diagnostic stage* is aimed at identifying intellectually gifted student youth among students of an out-of-school education institution. This stage covers:
- complex psychological and pedagogical diagnostics of students and identification of intellectually gifted students in the out-of-school education institutions;
- identification of potential giftedness in students who for certain reasons did not achieve success in learning, but are distinguished by bright cognitive activity, high intellectual abilities, analytical thinking, creativity, etc.;
- creation of an accumulative data bank of intellectually gifted student youth within the framework of the out-of-school education institution;

- formation of a set of diagnostic methods for individual assessment of potential opportunities of student youth of the out-of-school education institution in various types of activities;
- development of individual educational trajectories for intellectually gifted student youth in an out-of-school education institution;
- improvement of the system of identification of intellectually gifted student youth in an out-of-school education institution.
- 3. *Implementation stage* involves the actual implementation of the proposed technology in the out-of-school education institution.

The tasks of this stage include:

- organizing education of intellectually gifted student youth according to individual educational trajectories;
- raising the level of education, professional development and qualifications of teachers of the out-of-school education institutions who work with intellectually gifted students;
- modernization of the system of psychological and pedagogical education, counseling and socio-pedagogical support of parents of the intellectually gifted students;
- development of recommendations for educators of the out-of-school education institutions who work with intellectually gifted students.
- 4. *Summarizing and presentation stage* involves the analysis of the results of educational work with intellectually gifted student youth in an out-of-school education institution.

During this stage, we consider it appropriate to carry out the following measures:

- study and analysis of the results of education of intellectually gifted student youth according to individual educational trajectories;
 - creation of a portfolio of an intellectually gifted student;
- identification of difficulties, evaluation of the quality and efficiency of the work of educators of the out-of-school education institution with intellectually gifted students;
- generalization and dissemination of the progressive experience of educational work of educators of the out-of-school education institution with intellectually gifted student youth.

Conclusions

Thus, the institution of out-of-school education provides each intellectually gifted individual with the opportunity to freely choose an education field, the profile of programs, the time of their development, inclusion in various types of activities taking into account their individual capabilities and needs. In our opinion, the proposed technology helps to solve one of the main tasks of out-of-school education – identification, development and pedagogical support of gifted students, especially those with high intellectual abilities.

REFERENCES

- 1. Antonova, O. E. (2012). Theoretical and practical conditions for the creation of scientific and pedagogical support for gifted individuals in Ukraine. *Society and education: Międzynarodowe Studia Humanistyczne*, 2, 386-399.
- 2. Boichenko, M. A. (2018). *Theoretical and methodical foundations of gifted students education in the USA, Canada and the UK*. Sumy: Publishing House of the Sumy SPU named after A. S. Makarenko.
- 3. Law of Ukraine "On Out-of-School Education" (2021). URL: https://zakon.rada.gov.ua/laws/show/1841-14#Text.
- 4. Sbruieva, A. A. (2013). Education of gifted and talented: organizational principles and trends in the development of international cooperation. *Pedagogical sciences: theory, history, innovative technologies, 8 (34),* 14-26.
- 5. Voronina, H. L. (2010). Formation of professional competence of the leaders of the out-of-school education institutions. *Image of a modern teacher*, *9* (108), 49-50.

FORMATION OF ENGINEERING THINKING IN HISTORICAL RETROSPECT

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Summary

Specialists in engineering professions play one of the most important roles in the development of the state's economy. The prerequisites for their creation include development of scientific knowledge and training of engineers capable of design and engineering. The sphere of education performs an important function – preparatiom of future specialists, who in the future will be able to solve scientific and practical tasks in a non-standard and creative way, developing modern high technologies. One of the ways to achieve this goal can be formation of professional, engineering thinking, which includes professional awareness, readiness for future professional activity and innovations. The purpose of the article is to consider the periodization of engineering activity and technical education in the process of development of science and technology at the following stages: instrumentalization, mechanization, mechanical processing, automation, and cybernetization, and to identify their influence on the course of scientific and technical progress.

Key words: engineering education, engineer, engineering thinking, history of engineering education, science, technology, stages of development.

Introduction

The origin, establishment and development of engineering and technical education are important stages in the process of the formation of human civilization, significant stages in the development of technology, science and culture. Therefore, the most important task of every specialist in the field of mechanical engineering is to acquire a huge stock of experience and knowledge accumulated by previous generations, as well as to use them in relation to the needs and requests of modern technical production, scientific and technical progress.

Research results

The historical process of the formation and development of engineering activity and engineering education can be conventionally divided into five stages corresponding to the five main historical stages of technology development (Marjoram, 2010):

- 1. Creation of work tools, "instrumentation" (proto-engineering);
- 2. Creation of mechanisms, "mechanization" (pre-engineering);
- 3. Creation of machines, "mechanical processing" (properly engineering);

- 4. Creation of automated machines and mechanisms, "automation" (advanced engineering);
- 5. Creation of automated machines using artificial (machine) intelligence, "cybernetization" (post-engineering).

Each of these stages is determined by the level of development of science and technology, production and consumption, socio-economic and socio-political structure of society, its educational level. Each stage has its own level and way of engineering activity development and corresponding technical education.

The first stage – instrumentalization – is characterized by creating new tools and products instead of manual production tools. It begins with the appearance of writing and the separation of intellectual labor from physical labor during the transition from barbarism to ancient civilization (according to the classification of L. Morgan) and ends with the birth of technical knowledge in the conditions of craft production and the division of society into classes. A tool is classified as a device for making material changes to other objects, for example by cutting, striking, rubbing, grinding, compressing, measuring or other processes. A hand tool is a small tool that is traditionally powered by the muscle power of the user, while a machine tool is a mechanical mechanism used to cut or shape materials such as wood and metal. Tools are the primary means by which people control and manipulate their physical environment.

The development of the slave-owning method of production led not only to a class stratification into slaves and slave owners, but also to the emergence of a special stratum of technical specialists, engaged mainly in intellectual work – development of technical projects and devices, organizing work on their implementation. Thus, with the advent of antiquity, a special privileged stratum of society appeared between the classes of slaves and slave owners, which preceded the engineering and technical stage, the "proto-engineers" of the stage of instrumentalization. The Egyptian priest Imhoten (c. 2700 BC), the Chinese city planner Yu the Great (c. 2300 BC) and the Greek architect Eupalinius of Megara (6th century BC) are usually considered the first famous engineers). Archimedes was a genius scientist and an engineer of antiquity (McFadden, 2018).

From the very beginning, the basis of engineering activity was science, which in the preengineering period was generally speculative, fragmentary, internally contradictory, limited by religious ideas and largely detached from production. The origin and development of applied sciences, such as astronomy, mathematics and mechanics, although they were conditioned by the needs of industry, were sporadic, and the stock of empirical knowledge was rarely theoretically generalized. There was no science as we know it today, even in the ancient cultures of China, Egypt, Rome, Greece and other "oases" of antiquity. Accordingly, there was no systematic enriching of practice with scientific knowledge, but there were only episodic outbursts of brilliant conjectures that did not form a single body of science. Naturally, there was no systematic education at that time, except for trade apprenticeships.

At the same time, ancient technology gradually began to appear, multiply and accumulate structural and technical elements that ensured the interaction of the tool with the object of transformation and formation of individual technological operations. This led to the accumulation of constructive and technological knowledge, which, in combination with mathematics and mechanics, became the basis for the emergence of technical sciences at the next stage of scientific and technical development.

The second stage — mechanization (pre-engineering) — corresponds to the period of development of mechanisms and mechanization of production processes, which began at the previous stage, but became significant for production with the onset of a new era. A powerful impetus to the development of mechanical engineering was replacement of slave ownership by feudalism, which deprived the production of slave-free labor, which became scarce and required savings due to its mechanization. The process of mechanization especially intensified during the Renaissance (14-16 centuries), in the conditions of the rapid development of craft production and the subsequent development of feudalism.

Although the mechanical achievements of the Greco-Roman centuries were minor, they did not go unnoticed. There was one of the greatest mechanical geniuses in the world, Archimedes, who invented a wonderful weapon to defend the natives of Syracuse against Roman invasion and applied his powerful mind to such basic mechanical devices as the screw, the pulley, and the lever. Alexandrian engineers such as Ctesibius and Hera invented many ingenious mechanical devices, including pumps, wind and hydraulic organs, pneumatic motors, and lathes. They also invented toys and machines such as the wind turbine, which can be considered the first successful steam turbine. These inventions did not find practical use, but the Alexandrian school marks an important transition from very simple mechanisms to more complex devices that deserve to be called "machines". In a sense, it served as the starting point for modern mechanical practice (Britannica, 2016).

At that time, the term "engineer" appeared and became widespread in Europe (from the French *Ingenieur* and from the Latin *Ingenieum* – intelligence, cleverness, innate abilities). And it is not by chance – it was in Western Europe at that time that the center of scientific and technological progress moved. A powerful impetus to the formation of engineering activity in this period was: the achievements of mathematics and mechanics, the combination of science with practice and the development of experimental science; the development of craft production and the birth of a manufactory. It was a period of dramatic multiplication of inventions and discoveries; the era of great geniuses (Leonardo da Vinci, Agricola, G. Galileo and others) and the formation of qualified technical

personnel of craftsmen and engineers: military, mining, construction, shipbuilding, etc. (Polyakov, 2022).

The main socio-technical source of engineering activity at this stage was manufacturing production. However, only complex mechanisms set in motion by the traction power of animals, and then by the natural energy of water and wind (mills), were able to supplant manual craft labor as the main type of social production and ensure a fundamental revolution in the structure of productive forces. This led, on the one hand, to the formation of the working class as the main productive force of the capitalist mode of production, which was born in the bowels of feudalism, and on the other hand, to the formation of the engineering profession and the social status of engineers as a necessary element of productive forces. This, in fact, became the beginning of real engineering activity at the next stage of development.

The most important social event of this stage was creation of an education system that ensured training of the engineering personnel – specialists capable of research, development and operation of equipment. Therefore, from the end of the 16th century, there was a trend towards polytechnic education with the aim of obtaining technical knowledge at the universities of Italy, France, and Germany (*Industrial history of European countries*).

The third stage – mechanical processing (properly engineering) – became the period of formation of the engineering profession in social terms, acquisition of its social status. The basis for this transformation was the transition with the invention of the steam engine from manufacturing to machine production in the era of the collapse of feudal-serf relations and the establishment of capitalist production relations.

Machine, a device that has a unique purpose that supplements or replaces human or animal effort to perform physical tasks. This broad category covers simple devices such as an inclined plane, lever, wedge, wheel and axle, pulley and screw (so-called simple machines) as well as complex mechanical systems.

The operation of a machine may involve the conversion of chemical, thermal, and other forms of energy into mechanical energy or vice versa, or its function may simply be to change and transmit forces and motions. All machines have an input, an output, and a converting or modifying and transmitting device (Britannica, 2024).

Development of machine production led to the fact that the worker became an "appendage of the machine", completely deprived of the function of rationalizing technical activity. Finally, it was transferred to a separate group of scientifically educated workers – engineers. In the context of the beginning of the process of transforming science into a direct productive force, engineering activity became a scientific rationalization of technical activity. At the end of the 19th century, engineering and the profession already existed as a social institution. The rapid development of technology and

the growing demand for machines in industrial production contributed to the wide development of machine-building activities during this period (*Engineers and the Industrial Revolution in 19th Century Britain*).

The development of science, technology and engineering was associated with a sharp increase in the flow of inventions, a particularly sharp jump was observed on the eve of the industrial revolution. Invention became one of the brightest manifestations of engineering thought, and inventors turned into real "engines of technical progress", often ahead of their time with their genius. An extremely sharp burst of inventive engineering thought caused the social order of the universal heat engine (steam engine) and especially the bicycle (5000 patents in England in 1896).

The Industrial Revolution (late 18th and mid-19th centuries) marked a turning point in history when many societies transitioned from an agrarian economy to an industrial one. Let's consider a brief timeline of this era, exploring revolutionary inventions, social shifts, and long-term effects.

The world witnessed three transformative industrial revolutions that transformed society and the economy from mechanization to electricity, automation, and mass production.

The first industrial revolution (1760-1840):

- 1. Steam energy. James Watt's development of the steam engine in the late 18th century revolutionized industry by providing a reliable and efficient source of energy.
- 2. Iron ore and coal industry. Advances in iron technology and the use of coal as a fuel enhanced industrial growth, railroad construction, and machine building.
- 3. Water channels and railway networks. The construction of water canals and the subsequent expansion of railway networks facilitated transportation and trade, connecting distant regions and accelerating economic development.
- 4. Factory system. Creation of large factories and the division of labor changed the way goods were produced, increasing productivity and output.

The second industrial revolution (1840-1870):

- 1. Steel industry. The invention of the Bessemer process for the mass production of steel led to significant advances in construction, engineering, and transportation.
- 2. Electricity. The use of electricity and the development of electrical systems such as Thomas Edison's incandescent light bulb revolutionized manufacturing processes and changed urban life.
- 3. Communication and transport. The invention of the telegraph and the expansion of railway networks further accelerated communication and trade on a global scale.
- 4. Mechanical engineering. Advances in metalworking and engineering, including the invention of the sewing machine and the mechanical reaper, increased productivity in various industries.

The third industrial revolution (1870-1914):

- 1. Serial production and assembly lines. Innovations such as Henry Ford's assembly line and the introduction of interchangeable parts revolutionized manufacturing by making mass production possible and making goods more affordable.
- 2. Chemical industry. The development of chemical processes, such as the Haber-Bosch process for the production of ammonia, opened up new opportunities in agriculture and industry.
- 3. Automotive industry. The invention of the automobile and the widespread use of the internal combustion engine forever changed transportation and ushered in a new era of mobility.
- 4. Success in communication. The telephone, radio, and early forms of television improved communication and entertainment, bringing people together across great distances (*Unveiling the Industrial Revolution: Facts, Inventions, and Impact*).

The second half of this stage coincides with the era of industrialization, when manufacture finally gave way to large, technically advanced industry. Such industries as mechanical engineering and instrument building, metallurgy, energy, mining industry, chemical industry and transport received priority development. They became leaders and determined technical progress in general, the nature of engineering activity and the state of engineering education in particular. At the same time, the main function of engineering activity was the progress of technology, caused by sociotechnical needs and ensuring the maximum profit of capital.

The fourth stage – the creation of automated machines and mechanisms, "automation" (advanced engineering) – is associated with the onset of the fourth scientific and technical revolution (STR) or Industry 4.0 in the middle of the 20th century. A powerful stimulating factor in the development of engineering activity and engineering education at this stage was the rapid, anticipatory development of science and its transformation into a direct productive force. The continuous acceleration in the development of technology could not be carried out without the wide use of the results of scientific research. Science has finally taken the lead over technology, thereby ensuring a sharp acceleration of technological progress. Based on the main directions of R&D, the biggest revolution in the environment of production equipment unfolded, the road to complex automation based on flexible production systems (GPS), rotary and rotary-conveyor automatic lines (ARL and RCL), automated design systems (CAD) was opened. The leading element of complex automation was the machine control system based on microprocessors, controllers and microcomputers (What are Industry 4.0, the Fourth Industrial Revolution, and 41R?).

The penetration of science into industrial production and its unity with practice, the introduction of scientific and technical achievements into production caused the need for further development and improvement of the organization of science itself, engineering activity and engineering education. Organization of industrial and university research laboratories began, on the basis of which research institutes (R&D) began to be created.

Technical sciences entered a qualitatively new stage of development, characterized by establishment of a stable connection with natural science, as well as an intensive process of their differentiation and division into separate, special fields. The birth and subsequent rapid development of electrical and radio engineering, electronics, and nuclear physics began. The scientific foundations of microelectronics, nuclear engineering and technology have been laid.

With the advent of Industry 4.0, the nature of interaction between science, technology and production has changed radically. As a result of their close collision and interweaving, an inseparable triad "science-technology-production" was formed, in which science took a leading position, ahead of technology in its development, and technology – production.

The profession of a research engineer has moved to the level of leading engineering professions, such as a technological engineer and a design engineer, ensuring a closer connection between science and production. Organization of science on a national scale was developed on the basis of academies, research institutes and universities. There was a sharp complication of the structure of the engineering profession in accordance with the expansion of the field of engineering activity, the increasing complexity and versatility of technology.

The fifth stage — creation of automated machines using artificial (machine) intelligence, "cybernetization" (post-engineering) — the stage of development of engineering activity and engineering education is connected with the onset of the stage of cybernetization and the fifth stage of scientific and technical development, we are not afraid to call its Industry 5.0, which unfolded at the turn of the millennium, as well as the emergence of the fifth technological order, which is based on nanotechnology, genetic engineering, and the information revolution. Opportunities for the next social and technological revolution have ripened as a result of the scientific revolution that unfolded in the 1970's, the leaders of which became the triad of scientific and technical directions: microelectronics, informatics, and biotechnology. This once again led to a fundamental revolution in the nature of engineering activity and engineering education. The field of engineering activity has expanded tremendously, and in the field of engineering education there has been a rapid "multiplication" of specialties and specializations and, accordingly, the need for their clear definition, systematization and classification (*The fifth industrial revolution*).

Deployment of the fifth phase of R&D led to an extraordinary expansion of the field of engineering, the structure of which was influenced by a number of factors. Depletion of traditional energy resources and their negative impact on the environment, which forced the search and development of new non-traditional and practically inexhaustible (renewable) sources of energy, such as solar, wind, geothermal, tidal energy, etc.

The era of iron, which dominated as the main structural material for almost three millennia, is coming to an end, and increasingly priority is given to materials with increased and predetermined

chemical, physical and mechanical properties: plastics, composites, ceramics, powder materials. The technological revolution is carried out on the basis of the widespread development of fundamentally new low- and zero-waste technologies for the extraction and processing of raw materials. This will make it possible to skip a number of intermediate operations, at lower costs and in a shorter time to obtain the final product using laser, plasma, electric-pulse, membrane technologies, geo-bio-technologies, SHS-technologies, etc.

The technical base of science is being significantly transformed thanks to the widespread use of CAD, process management, and automation of experiments, which has made it possible to reduce the share of manual labor in science and design, increase creative potential, and significantly shorten the path from the birth of a new and fruitful idea to its implementation in a fundamentally new technique and technology. The direction of space exploration and development changed, the period of "scientific feats" and the defense of priorities, regardless of costs, ended, and people began to move from scientific and military to industrial and commercial research.

The ocean and its inexhaustible wealth have also become the object of intensive industrial development. The extraction of minerals from shelves and the seabed and their direct extraction from seawater is expanding, as well as the transition to mariculture – from natural to artificial reproduction of the flora and fauna of the seas and oceans.

With the help of the Internet, the telecommunications network and the widespread use of electronic household appliances, broad segments of the population began to be actively involved in the global information space, becoming not only owners of information, but also its active creators. These trends in engineering are also leading to an inevitable transformation of engineering education. The general computerization and informatization of education, the use of artificial intelligence (AI) systems, first of all engineering systems, the wide use of video technology and other modern technical means of education make it possible to intensify the educational process and activate students' work. Artificial intelligence in engineering offers many advantages. It provides a personalized and adaptive learning experience that meets the unique needs and learning style of each student. The integration of artificial intelligence into educational platforms allows students to participate in interactive simulations, practical experiments, solving engineering and technological tasks. This dynamic approach to learning develops critical thinking skills and enhances creativity, preparing students for success in an ever-evolving technology landscape (AI in engineering education, 2024).

Conclusions

One of the most important features of engineering activity in the conditions of scientific and technical development is its internationalization, the development of international scientific and technical cooperation and the unification of efforts of all progressive-thinking engineers in solving

the global technical problems of today. Creation of unified international systems of energy saving, transport and information are the main directions of cooperation of engineers from different countries.

The global problems of modernity are caused by the aggravation of contradictions in the development of the method of production of material goods. First of all, this is the deepening of contradictions between nature and society, which consists in the violation of the stability of the environment and the deterioration of its quality. From the point of view of production technology, it is engineers who bear the greatest responsibility for worsening the social and ecological situation. Society makes contradictory demands on engineers – increasing the power of equipment and the intensity of technologies, expanding production while limiting their impact on the environment and people.

Participation of engineers in international cooperation based on the achievements of scientific and technical development is of particular importance for developing countries as a means of overcoming their economic, scientific and technical backwardness. Solving the global problem of providing the planet's population with energy carriers also depends on the development of machine-building activities. The scientific and technical foundations of new renewable energy sources have been developed, but their development, implementation and operation are delayed due to the lack of engineering projects of highly economical and efficient power plants. An important result of scientific and technical development, which changed the relationship between the forces of nature and society, was the rejection of the "revolutionary" principle of engineering "transformation of nature", which prevailed in our country until the middle of the 20th century. The transport problem is waiting to be solved as soon as possible, a transport revolution is coming, for which engineers must be ready in time and establish engineering education.

The increase in the degree of labor intensity, its frequent change and the change of generations and directions of technology will make a narrow professional division of labor unprofitable. There will be a need for engineers, as well as workers, technicians, managers, scientists and other workers in the production sphere, who have a wide range of training and are able to adapt well to rapidly changing working conditions and areas of their activity. Of particular importance is the fundamentalization of engineering education, which should be understood as the assimilation of knowledge from the history of technology development, the laws and regularities of its structure and functioning.

REFERENCES

1. AI in engineering education (2024). URL: https://mmcalumni.ca/blog/ai-in-engineering-education.

- 2. Britannica, The Editors of Encyclopaedia (2016). "Aeolipile". *Encyclopedia Britannica*, 6 Jun. 2016. URL: https://www.britannica.com/technology/aeolipile.
- 3. Britannica, The Editors of Encyclopaedia (2024). "Machine". *Encyclopedia Britannica*, 4 Mar. 2024. URL: https://www.britannica.com/technology/machine.
- 4. Engineers and the Industrial Revolution in 19th Century Britain. URL: https://www.nber.org/digest/202205/engineers-and-industrial-revolution-19th-century-britain
- 5. *Industrial history of European countries*. URL: https://www.erih.net/how-it-started/industrial-history-of-european-countries.
- 6. Marjoram, T. (2010). History of engineering: engineering in UNESCO. In *Engineering: Issues, Challenges and Opportunities for Development*, pp. 29-39.
- 7. McFadden, C. (2018). *13 Engineers from Antiquity and Their Marvels*. URL: https://interestingengineering.com/innovation/13-engineers-from-antiquity-and-their-marvels
- 8. Polyakov, M. (2022). The Renaissance and the Shaping of the Scientific Tradition: Scientific Discoveries and Inventions of Leonardo da Vinci. URL: https://maxpolyakov.com/renaissance-scientific-discoveries-and-inventions-of-leonardo-da-vinci/.
- 9. *The fifth industrial revolution*. URL: https://aerospacecareersprogramme.co.uk/wp-content/uploads/2023/09/The-Fifth-Industrial-Revolution-Final.pdf.
- 10. *Unveiling the Industrial Revolution: Facts, Inventions, and Impact.* URL: https://www.centreofexcellence.com/industrial-revolution-timeline/.
- 11. What are Industry 4.0, the Fourth Industrial Revolution, and 4IR? (2022). URL: https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-are-industry-4-0-the-fourth-industrial-revolution-and-4ir.

USE OF MULTIMEDIA TOOLS IN THE PREPARATION OF FUTURE EDUCATORS FOR ECOLOGICAL AND VALEOLOGICAL EDUCATION OF PRESCHOOL CHILDREN

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Modern problems of the relationship between man and environment, the growing scale of anthropogenic influences on nature and, as a result of this deterioration, the health of new generations, the desire of the world community to switch to sustainable ecological and economic development, actualize the problem of forming harmonious relationships of the individual with the environment and an active attitude to one's own health. The defined deep essential relationship between human health and the state of the environment, which is reflected in modern ecological and valeological knowledge, leads to the study of the problem of ecological and valeological education, which is focused on the formation of harmonious relationships in the "man – nature" system.

The starting point of continuous ecological and valeological education is preschool education, the main task of which is to lay the foundations for harmonious relations of children with the environment, characterized by the manifestation of cognitive, moral, aesthetic, practical aspects, as well as activity in relation to one's own health.

This problem is particularly important in the professional training of future specialists in preschool education. The lack of an appropriate level of readiness makes it necessary to carry out a scientific search for pedagogical means of preparing future educators for ecological and valeological education of preschool children.

A promising means of improving the educational process in institutions of higher education is currently the use of a multimedia system. Modern teaching is impossible without the use of multimedia technologies as a tool for its improvement and optimization. Taking into account the above, it is appropriate to consider multimedia as one of the effective means of preparing future educators for ecological and valeological education of preschool children.

The expediency of addressing the chosen problem is confirmed by the provisions of the laws of Ukraine "On Education" (2017), "On Higher Education" (2014), "On Preschool Education" (2001), Concept "New Ukrainian School" (2016), National Doctrine of Education Development (2002), "Concept of Education of Children of Early and Preschool Age" (2020), "Basic Component of Preschool Education (State Standard of Preschool Education)" (with amendments) (2021).

In order to create the theoretical foundation of the study, the clarification of the terms regarding the use of multimedia tools in the preparation of future educators for ecological and

valeological education of preschool children is updated. To such scientific terms we referred: "preparation", "readiness", "professional training", "professional training of future educators", "ecology", "valeology", "health", "upbringing", "ecological and valeological education of children of preschool age", "ecological and valeological competence of future educators", "multimedia".

In the context of substantiation of the investigated problem, the definition of the key concept "preparation" is provided. In the Great Explanatory Dictionary of the Modern Ukrainian Language, edited by V. Busel, the concept of "preparation" is interpreted as "stock of knowledge, skills, experience acquired in the process of learning, practical activity" [3, p. 767]. The scientist O. Kurok considers "preparation" as "a process that ensures formation of a qualitatively new type of activity of the subject" [14]. In the research of scientists (O. Dubaseniuk, T. Semeniuk, O. Antonova) [6, p. 235] this term is defined from the position of "actions aimed at developing skills in a person, imparting knowledge to him, forming a life position, which is necessary for employment in a certain specialty or for work in any sphere of social life".

Having conducted content analysis of the "preparation" phenomenon, we determined that researchers (A. Zasluzhena, O. Kurok, I. Sokol, et al.) associate the essence of this term with preparation for professional activity. Analytical generalizations of the term "professional training" formulated by legislative documents and leading scientists are important in the context of our research. In particular, the Law of Ukraine "On Higher Education" states that professional training is the acquisition of qualifications in the relevant field of training or specialty [8]. In our opinion, special attention deserves A. Zasluzhena's interpretation of preparation for the performance of professional activities as "formation of a student in the process of learning and practical activities by acquiring a system of knowledge, skills, abilities and experience, as a result of the multifaceted development of the personality with requirements determined by the specifics of professional activity, readiness to perform this activity" [11, p. 17]. In accordance with the topic of our research, we share T. Sadova's view on the essence of professional training of future specialists in the pedagogical field, which is defined as "preparation for certain types of activities of the future educator, which is connected with the integral formation of certain knowledge, skills and personal traits" [19].

Analyzing the defined interpretations, we can come to the conclusion that the result of professional training is readiness for professional activity. The reference source interprets the term "readiness" as a "state in which everything is done, everything is ready for something, as the final result of some action, state" [20]. A comparison of the essence of the definitions "preparation" and "readiness" shows that they are interconnected and we consider the term "preparation" as a process, and "readiness" as a result of an action.

Readiness for professional activity is considered in the context of a specific type, form or quality. The subject of research envisages determining general readiness of an individual for

professional (including pedagogical) activity, and its formation and development occurs in the future specialist in the process of professional training at a higher education institution. A thorough interpretation of the concept of a person's readiness for pedagogical activity is given in the work of I. Sokol, where it is considered as "a set of qualities that ensure its success in the performance of professional and pedagogical functions" [21]. The researcher summarizes various approaches in determining the structure of the future teacher's readiness for professional activity and emphasizes the set of various components that are mutually determined and interconnected, and which are distinguished according to their specific functions, in particular [21, p. 44-45]:

- 1) motivational as a set of motives adequate to the goals and tasks of a certain type of professional activity;
- 2) cognitive, related to the cognitive sphere of a person, which is a set of knowledge necessary for productive activity;
- 3) operational a set of abilities and skills of practical solution of tasks in the process of performing activities;
 - 4) personal a set of personal qualities important for the performance of activities;
- 5) creative characterized by original solutions to pedagogical tasks, improvisation, impromptu; manifests itself through openness to pedagogical innovations; flexibility, critical thinking; creative imagination;
- 6) reflexive characterizes educator's knowledge and analysis of the phenomena of his own consciousness and activity;
 - 7) emotional and volitional ensures professional endurance, stability, regulatory properties.

Therefore, generalization of the specified components allows us to state that educator's readiness for professional activity has a complex structure, which is a synthesis of the following interrelated components: motivation for activity, a system of professional values (motivational component), professional knowledge (cognitive component), professional skills and abilities (activity component) and personal qualities necessary to perform this activity (personal, creative, reflexive component).

Guided by the fact that the main subject of our scientific search is the future educator, it is logical to turn to the professional training of future educators. The specified problem is the issue of close attention of Ukrainian scientists, in particular: R. Aronova, D. Voronin, M. Honcharenko, D. Davydenko, O. Dubohai, S. Diachenko, I. Zhadlenko, T. Zharovtseva, L. Zavhorodnia, N. Knysh, Yu. Rybka, S. Petrenko, O. Polishchuk, I. Rohalska-Yablonska, R. Savchenko, A. Chahovets, et al.

Analysis of pedagogical research [2; 24] and dissertations [1; 23] indicates that scientists consider the phenomenon of "professional training of future educators" as follows:

- the ability to perform professional tasks based on professional knowledge and skills, integrated with development of personal professionally significant qualities, the leading ones being love for children combined with demandingness, empathy and communication [2];
- integrative professional and personal characteristics of a specialist, which includes a set of values, motives, knowledge, skills, experience, personal and psychological qualities that ensure his ability to effectively perform professional functions and tasks, promote self-realization and self-development [1];
- a system of organizational and pedagogical measures that ensure formation of a professional orientation, a system of knowledge, skills, abilities and professional readiness in an individual, which, in turn, is defined as the subjective state of an individual who considers himself capable and prepared to perform a certain professional activity and strives to fulfill it [23];
- readiness to perform educational tasks related to the harmonious development of children
 [24]

Integrating approaches to the definitions of the studied phenomenon, "professional training of future educators" is understood by us as the process of mastering necessary theoretical and methodological competences of a professional orientation, development of a set of professionally significant and personal qualities and abilities.

Since the initial position of our research is to reveal the concept of "preparation of future educators for ecological and valeological education of preschool children", it is expedient to refer to the essence of the key terms – "ecology" and "valeology". An analysis of the essence of the "ecology" phenomenon will be appropriate in this context. Modern ideas about it are based on the fact that this concept was first used in 1866 by the German scientist E. Haeckel, and the etymology of its origin is traced to two Greek phenomena: "oikos" – home, family and "logos" – word, science [9, p. 8]. The researcher defined ecology as "the science of the balance between the organism and the environment", the subject of which is the relationship of living beings with both inorganic and organic nature. According to the views of scientists (M. Horun, H. Pyrih, V. Faifura, M. Fedirko) [5], ecology is defined as a science that studies the relations of organisms, their individual representatives or populations with each other and with nature, and investigates the influence of its factors on functioning of the human body.

From this definition, it is clear that ecology is not limited to the study of environmental problems, preservation of optimal parameters of natural, cultural and man-made environments, but appears as a synthesis of knowledge about man and everything that surrounds him, their interrelationships and mutual influences. The main goal of ecology is formation of the principles of coexistence of living organisms in all spheres of life. The above makes it possible to state that ecology is one of the most important sciences of today and the future – the existence of all living things on

the planet will depend on its development. The elements of harmonious, balanced relations between human society and nature are laid down in childhood, namely in preschool age.

Therefore, the environmental aspect should be organically included in the process of education of the population of all age categories, which corresponds to the concept of "continuous education". The analysis of current research convincingly proves that the issues of ecological education are being actively developed by modern philosophers (O. Halieieva, V. Lypytskyi, M. Kiseliov, V. Krysachenko, M. Kurok, H. Platonov, O. Saltovskyi, et al.) and specialists in pedagogy (A. Zakhliebnyi, I. Zvierev, O. Plahotnyk, et al.). To improve ecological education, the following concepts are often used as a source of inspiration, knowledge and skills: "education in nature" (Democritus, L. Alberti, Aristotle, A. Baumgarten, J. Heder, A. Dürer, I. Winkelman, et al.), "naturalistic education", represented by several pedagogical schools (A. Diesterweg, J. Comenius, J. Rousseau, J. Pestalozzi, V. Sukhomlynskyi, K. Ushynskyi, et al.). The problem of ecological education of preschool children, fostering careful attitude to nature, formation of ecological culture is the subject of close attention in the works of the Ukrainian scientific community – H. Bielienka, N. Vakhniak, V. Volkova, O. Havrylo, N. Hlukhova, N. Lysenko, V. Marshytska, Z. Plokhii, H. Tarasenko, N. Yarysheva, et al.

The next concept to be defined in our research is "valeology". The etymology of the concept is as follows: it comes from the Latin "valeo" – to be healthy and the Greek "logos" – teaching. I. Brehman is considered to be the founder of the science of human health in its current understanding. According to his definition, "valeology" is the science of formation, preservation and strengthening of individual human health in spiritual, mental, physical and social terms. A significant contribution to the development of valeology at the current stage was made by M. Honcharenko, H. Ivanova, H. Toporov, and I. Muravov. They covered a wide range of concepts of valeological science, provided versatile reference material: basic concepts and terms related to the health-preserving educational process.

Regarding modern interpretations of the concept of "health", there are different approaches to its definition. More than 300 definitions of "health" are offered in the scientific literature. Since the middle of the 20th century, this phenomenon has attracted the interest of specialists from all over the world, so a large number of its definitions appear. In particular, in the "Grand Larousse Encyclopedigue" health is defined as the state of an individual whose body functions well. A close definition is given in the Encyclopaedia Britannica as a state of physical strength and well-being in which the body performs its functions correctly.

The definition of the concept of "health" acquired the most controversial character after the creation of the World Health Organization (WHO) in Geneva. As a result, in the preamble of the WHO Charter in 1948, the following definition was given: "Health is a state of complete physical,

spiritual and social well-being, and not just absence of disease and physical infirmity" [17]. In 1984, the WHO working group, discussing "Concepts and principles of health care", developed a new interpretation of this term: "Health is a degree of ability of an individual or group, on the one hand, to realize their aspirations and satisfy needs, and on the other hand to change environment or cooperate with it. Therefore, health is considered as a resource, not the goal of life" [17]. In the majority of modern domestic and foreign works, human health is defined as a complex phenomenon, as an object of consumption, investment of capital, as an individual and social value, a phenomenon of a systemic nature, dynamic, constantly interacting with the environment, which, in turn, constantly changes.

The results of the analysis of the researchers' definitions (M. Amosov, H. Apanasenko, T. Boichenko, I. Brehman, V. Butenko, E. Goldsmith, V. Horashchuk, S. Horchak, D. Izutkin, B. Iliin, V. Kaznacheiev, P. Kaliu, V. Kolbanov, Ye. Kudriavtseva, Yu. Lisitsin, V. Petlenko, V. Rozin, H. Tsarehorodtsev, A. Shchedrin, et al.) allow us to assert that the concept of "health" is a multidimensional and at the same time holistic phenomenon of mutually coordinated human activity. Taking into account the essence of the proposed definitions, in our opinion, the concept of "health" should be considered according to two criteria: first, as a dynamic state that is able to ensure the duration and quality of life, optimal working capacity, harmonious interaction of organs and body systems. This approach to the interpretation of health can be called static, since it characterizes the well-being of a person in a certain short period of time. Secondly, as a process of making one's own efforts for self-preservation in order to lead active life. The second criterion is important for our research, since the content essence of the definitions is focused on the interaction of a person with the surrounding social and natural environment.

In order to clarify the essence of the concept of "education", let's turn to the reference publication to understand the etymology and meaning of the given term. Thus, in the psychological encyclopedia, O. Stepanov gives the following definition: "planned and purposeful influence on the child's consciousness and behavior with the aim of forming in him moral concepts and attitudes, principles, value orientations and practical behavior skills that create conditions for his development and prepare him for future public and labor activities. In the process of education, volitional qualities and personality traits are developed, his physical, mental, worldview, moral, aesthetic and other features are formed. Considering education as a process that is realized through the interaction of educators and pupils, as well as the pupils themselves, psychology studies the patterns of personality self-development under the conditions of a specially organized education system, which ensures that the child is not passively adapted to the existing forms of social existence, not brought under a certain socially established standard, but is purposefully developed as a unique individuality, as a creator of himself and circumstances..." [22, p. 57].

Various manifestations and interpretations of this word are described by V. Yahupov: "in the Romance language, a word of Latin origin was used to define educational activity – education, in French – pedagogie – education, in Italian – pedagogia – educazione, in German – padagogik – erziehung, in Polish – edukacia and wychowania. In the Ukrainian language, upbringing is derived from the word chovati – to hide, to grow. In Ukrainian folk pedagogy, it was first used in the sense of "to protect (hide) a child from danger", and later it began to mean "to raise children, to teach the rules of good behavior" [25, p. 422].

In general, in pedagogy, the concept of "education" is used in a broad and narrow sense. In a broad sense, it is a specially organized, purposeful and controlled influence of the educator on the pupil with the aim of comprehensive development of the personality. Education in this sense means the teacher's integral influence on the development of all aspects of the pupil's personality: needs, abilities, feelings, views, character traits, etc. The concept of education in a broad sense includes two narrower concepts: education and upbringing. Education in the narrow sense is the purposeful influence of the educator on the development of the motivational and value sphere of the pupil's personality (i.e. upbringing) [25]. Based on the above, we define education as a process of regular, consistent, continuous change in the moments of development of interacting subjects. Pedagogical interaction is the main system-forming element of this process.

In terms of our research, it is appropriate to consider the terminological phrases "ecological education" and "valeological education". In the study of S. Repeta and N. Dzhura [18, c. 200] the most used definitions of the concept of "ecological education" were systematized: "a system of forming relevant ecological knowledge, views and beliefs based on universal human norms and laws of the nature development, and education of preschool children is aimed at the systematic assimilation of knowledge about "communication" and interaction of man and nature" (Concept of ecological education in Ukraine); "a specially organized and purposeful process of formation of relevant knowledge about the natural environment, as well as the gradual formation of a positive and responsible attitude towards nature in the process of interaction with it" (L. Kurniak). As the definitions show, the essence of ecological education consists in the transfer of ecological knowledge and its transformation in relation to the attitude to the natural environment, which is manifested in the child's behavior. Scientist S. Ivanchuk, summarizing various views on this issue, in the process of ecological education of preschool children defines three processes that are interconnected: the first process involves development of ecological culture through the formation of relevant knowledge, the second – formation of children's ability to interact with nature through the system of personally formed practical experience, the third – provides and determines formation of the skill of caring for nature [12, p. 74-78].

The general goal of ecological education of preschool children is formation of harmonious relations of the younger generation with environment based on achievement of personal, social and natural well-being. The tasks of ecological education are determined by preserving health of the educational environment and natural capacity of the educational process, which is oriented to the personal characteristics, capabilities, and inclinations of the subjects of education.

The results of the analysis of the studies of Ukrainian scientists (T. Andrushchenko, S. Babiuk, T. Babiuk, O. Bohinich, E. Vilchkovskyi, L. Hurash, N. Denysenko, N. Zakharova, O. Kovshar, S. Kondratiuk, O. Loza, L. Lokhvytska, V. Martyniuk, M. Mashovets, V. Nesterenko, A. Oshkina, L. Svarkovska, et al.) allowed us to clarify the essence of the concept of "valeological education" as a process of pedagogical interaction between the teacher and children, which involves creation of safe and comfortable conditions for children's stay in a preschool education institution, ensuring the child's individual educational trajectory, preventing stress, overload, and fatigue of pupils, thereby contributing to the preservation and strengthening of children's health, and its effectiveness depends on the definition and implementation of interrelated components: goals of health care activity, its content, methods, means used in the process of health care. We consider the goal of health care process to be the education of a healthy individual who cares about his own health and the health of others, strives to lead a healthy lifestyle.

Integration of the concepts of "ecological education" and "valeological education" allows us to outline the ecological and valeological education of preschool children as a purposeful process focused on the formation of harmonious relations of children with the environment, which are manifested through cognitive, moral, aesthetic and practical components and an active attitude to their own health.

In order to effectively carry out ecological and valeological education of preschool children, future educators must themselves possess ecological and valeological competence. Considering this, we are interested in research by scientists (O. Anishchenko, L. Arkhypova, Yu. Boichuk, L. Drozhyk, S. Knysh, I. Shcherbak, et al.) of the ecological and valeological competence of the individual. L. Drozhyk considers the ecological and valeological competence of the future teacher as an integrated characteristic of professional and personal qualities that reflects the level of formation of ecological and valeological values, knowledge, skills and practical experience that enable him to successfully carry out pedagogically oriented ecological and valeological activities aimed at preserving health and environmental protection in the conditions of worsening ecological situation, implementation of ecological and valeological training and education of the younger generation. An integrated approach makes it possible to determine the ecological and valeological competence of the future educator as an integrated category, a holistic formation consisting of interconnected components, the functioning of which leads to the emergence of new (emergent) qualities of students: ecological and valeological

knowledge and skills, skills of ecological and valeological activity. According to L. Drozhyk and I. Shcherbak, formation of ecological and valeological competence of future educators is ensured by organizing the educational process, which provides for the integration of ecological and valeological knowledge of pupils with personal experience and develops a personal position regarding the need for nature protection and health care activities. Ecological and valeological competences, according to Yu. Boichuk, are a set of interconnected semantic orientations of an individual, his knowledge, methods of activity in relation to the preservation, restoration and development of one's own health and the environment in the conditions of a stressful ecological situation. Agreeing with the scientists, we believe that the future preschool teacher should first of all have the following skills:

- systemic knowledge about the integrity of man and the environment, synergetic principles of world building, technological activity and its influence on the course of ecological processes in the natural environment;
 - perception of human health as a criterion of environmental quality;
 - modern strategies for overcoming the ecological crisis and the place of spiritual values in it;
 - a system of ecological and valeological values;
 - ecocentric orientation of interaction with the surrounding world;
 - positive motivation to preserve the environment and one's own health;
 - knowledge and skills of practical ecological and valeological activities.

The ecological and valeological component of professional and pedagogical education in the system of continuous professional development becomes a factor in the formation of attitudes that ensure the elimination of health expenditure and establishment of health-saving education, preservation and strengthening of the health of its subjects. Ecological and valeological competence is understood as implementation of the pedagogical process on the basis of nature conformity, resource and health conservation; availability of relevant skills, etc. Diversification of the ecological and valeological training of future educators is correlated, as S. Shmalei notes, with the following phenomena: ecological and valeological training; ecological and valeological preparedness; ecological and valeological competence; ecological and valeological readiness. The epistemology of ecological and valeological training of future teachers, aimed at forming readiness for diversified recreational activities, is determined by the interrelationship of the following factors:

- orientation of the educator on subject-subject relations in the process of education, since his ecological and valeological training is aimed at forming, on the one hand, an arsenal of educational tools in his field of knowledge, and on the other hand, competences that make it possible to line up, on the basis of this arsenal, the algorithm of a diversified health-improving educational process, which takes into account age and individual characteristics, capabilities and inclinations;

- the educator's participation in the creation of a health-improving educational environment based on mastering the methods of didactics, valeosophy, valeometry, and the ecological-valeological educational process;
- diversification of meaningful lines in his field of knowledge, which is worked out by the teacher on the basis of ontodidactics.

Therefore, based on the given definitions, we will consider ecological and valeological competence as an integrated characteristic of the professional and personal qualities of the future educator, which reflects the level of formation of ecological and valeological values, knowledge, skills and practical experience that enable him to successfully carry out pedagogically oriented ecological and valeological activities with children of preschool age, in various environmental situations, to make decisions and perform adequate actions that are safe for health and the environment. We interpret preparation of future educators for ecological and valeological education of preschool children as a complex and multi-functional process aimed at students' awareness of the motives and needs of ecological and valeological activities; acquisition and assimilation of ecological and valeological knowledge, skills and abilities and their creative use; formation of values and mastering the methods of development of ecological and valeological qualities of children, necessary for the implementation of effective ecological and valeological professional and pedagogical activities. The readiness of future educators to form in children ecologically and valeologically motivated behavior should be the result of their ecological and valeological training in a higher education institution, formation of their ecological and valeological competence. Becoming ready for the corresponding activity means formation of a system of such motives, interests, attitudes, personality traits, knowledge, experience of practical activities of students, which, being activated, will provide the opportunity to effectively perform their professional functions related to the ecological and valeological activities of the teacher of preschool education institution.

Therefore, higher education institutions are of great importance in the formation of the ecological and valeological competence of future educators of preschool education institutions, since they have created theoretical and methodological foundations for the formation of a sustainable ecological position of student youth, awareness of their own involvement in environmental problems, consideration in professional, social and everyday life areas of environmental impact. We will reveal the most important components of professional activity of the future educator, which involve methodological aspects of preserving and strengthening the health of preschool children and forming in them a caring attitude towards the environment.

The ecological-valeological component of education has a powerful integral potential, implementation of which combines individual educational factors into a holistic valeological educational environment, which can provide an effective solution to the complex task of forming and

developing a healthy child. We have identified the conditions for creating a single health-preserving educational environment in a preschool education institution:

- valeologization and ecologization of the educational process, which involve targeting preservation, strengthening, and development of the child's physical, spiritual, and social health;
- a comprehensive approach to the process of learning, upbringing, and development, which are integrated into the concept of "education";
- adaptation of the child to the conditions of stay in the preschool education institution through lifestyle, culture of relationships and increasing adaptation potential as a prognostic sign that ensures health in the future;
- taking into account age and individual psychosomatic capabilities, characteristics of children;
 - environmentalization of the developing subject environment;
 - the subject-subjectivity of the relationships between the educator and the child;
- the regional aspect of education, which allows to touch the feelings of the child on the content that is close and understandable to him;
 - systematic upbringing in preschool education institution and family.

The carried out scientific search made it possible to outline the key principles of ecological and valeological education of preschool children, which are the main, guiding provisions, normative requirements for the organization of the specified process:

- *the game principle* is based on the use of game methods and tasks, which allows preschool children to actively interact with the environment and have fun;
- the principle of scientificity envisages that all ecological and valeological information offered to children of preschool age is based on scientific factual material;
- the principle of accessibility means that scientific information is logically structured, adapted to the perception of preschool children;
- the principle of visuality involves accompanying information with demonstration of visual material, conducting experiments, examples from children's lives, literary sources, using artistic figurative words;
- the principle of systematicity and consistency provides for the planned organization and design of material related to ecological and valeological education of preschool children; presentation of new knowledge is based on general knowledge that children already have; complication of methods in accordance with the content of the educational material;
- the principle of age targeting ensures that children's age characteristics are taken into account in the process of providing them with ecological and valeological knowledge, without creating intellectual, physical and moral overloads;

- the principle of taking into account individual characteristics requires the educator to know and take into account the individual capabilities of the individual, his physical development, individual biological rhythms, state of health, intellectual and moral qualities;
- the principle of activity ensures consolidation of theoretical knowledge in practical activities with children of preschool age, creating conditions for independent search of factual material regarding preservation of one's own health and preservation of natural resources;
- the principle of nature conservation is based on the formation of children's skills and abilities aimed at a careful attitude towards nature, efficient use of resources and preservation of natural resources;
- *the principle of the partnership approach* consists in the cooperation of the preschool education institution with parents and other adults regarding organization of a favorable environment for ecological and valeological education of preschool children;
- the principle of integration is based on the presentation of ecological and valeological knowledge in connection with other educational areas (speech, sensory-cognitive, artistic, etc.), which contributes to the harmonious development of children;
- the principle of interaction with the natural environment is based on the active participation of children in nature observations, excursions and games in the fresh air to increase their level of ecological and valeological awareness.

The presented principles contribute to ecological and valeological education, fostering preschool children's positive attitude towards nature, their responsibility and desire to take care of the surrounding world and their own health.

The task of ecological and valeological education of preschool children consists in:

- cultivating love, sensitivity, benevolent attitude towards objects of nature;
- fostering the need for communication with nature, the ability to observe and feel its beauty and the harmony of one's soul during one's stay in nature;
 - developing interest, desire to learn about nature, its influence on our body;
 - fostering a culture of behavior, responsibility for one's own actions in nature;
 - developing the ability and skills to take care of natural objects and one's own health;
 - ecological and valeological orientation of activity.

Organized cognitive-educational ecological and valeological activity in everyday life according to a plan and under the guidance of an educator can take various forms: classes, observations, games, excursions, meetings with interesting people, theatrical activities, ecological and vale minutes. All the mentioned forms are important in ecological and valeological education, and their effectiveness depends on a correctly selected system of consecutive methods of interconnected health-preserving activities, i.e., methods and means.

The methods of preschool pedagogy are classified as follows:

- by sources of knowledge: visual (observation, demonstration), verbal (narration, listening to works of fiction, conversation), practical (exercises, games, experiments, modeling);
- by type of cognitive activity: explanatory-illustrative, reproductive, partially-research (heuristic), problem-based, research, method of solving inventive tasks.

We believe that each of the methods listed above is relevant in ecological and valeological education and can be used by the educator depending on the defined program tasks and goals. By no means denying the visual, verbal and practical methods, still more emphasis should be placed on problem-based and search methods. This is explained by the fact that traditional (reproductive) methods do not always give the desired result, since they are mostly aimed at memorizing those ecological and valeological knowledge and skills that the teacher is the bearer of, and this crosses out the personality-centered model of interaction with the child.

Based on the findings of psychologists and educators that a child is a small researcher from birth, we see the greatest effectiveness in "interactive methods". They are based on the involvement of all senses in cognition and perception (the theory of S. Rusova):

- the method of multi-channel activity (it is known that children learn better the information that touches their feelings, so the main thing is to arouse interest in the problem, positive emotional and value motivation to fulfill the ecological and valeological task);
- method of active modeling (practical model of education with the help of games, fairy tales, theatrical activities);
- problem solving method (an ecological and valeological problem is chosen that does not have an unambiguous solution);
- microphone method (group discussion that gives everyone the opportunity to express their own opinion on an ecological and valeological problem);
- the method of intellectual moments (its aim is to collect as many ideas as possible regarding the ecological and valeological issue from all children within a limited time);
- the method of magical reincarnations (helps children imagine themselves in a different image).

It is worth emphasizing that by using active methods and tools of interaction with the child in the process of ecological and valeological education, thinking will be activated, cognitive and developmental capabilities will be improved, and a holistic system of introducing knowledge, abilities and skills regarding nature conservation activities and preserving preschool children's health will be formed.

Having clarified the essence of the key terms of the problem of using multimedia tools in the preparation of future educators for ecological and valeological education of preschool children

("preparation", "readiness", "professional training", "professional training of future educators", "ecology", "valeology", "health", "upbringing", "ecological and valeological education of preschool children", "ecological and valeological competence of future educators"), let's start considering the means that will be effective in solving it.

A promising way to improve the educational process in institutions of higher education is the use of a multimedia system. Modern teaching is impossible without the use of multimedia technologies as a tool for improving and optimizing the educational process. Multimedia makes it possible to provide flexibility to the educational process and strengthen its applied focus. Multimedia is understood as a modern computer technology that allows to combine text, sound, video images, graphic images and animation in a computer system. The use of virtual reality in the educational process generates the effect of presence, which helps to activate the processes of attention, imagination, memory and perception. Due to the simultaneous use of graphic, audio (sound) and visual information in multimedia products and services, these tools have a great emotional charge and actively involve the user's attention.

The purpose of using multimedia technologies in the educational process is to increase the effectiveness of teaching, the main purpose of which is to improve various knowledge, skills and abilities. The means of multimedia technologies, under the condition of their appropriate use, contribute to the development of communicative, cognitive, creative abilities and information culture of future specialists. Their use in the process of professional training allows to create conditions that are as close as possible to real production conditions.

Based on the results of scientific research by V. Zabolotnyi [7, p. 12] we can claim that the widespread use of multimedia technologies can dramatically increase the effectiveness of active learning methods for all forms of organization of the educational process and creates comfortable working conditions for the teacher. It is advisable to use multimedia teaching aids at the stage of students' independent training, at lectures, seminars, practical and laboratory classes. Multimedia teaching aids allow: to increase the informativeness of the lecture; stimulate learning motivation; increase visibility of training, availability and perception of information. Multimedia is an important tool for keeping attention of the audience. Their use contributes to the activation of attention in the phase of its biological decline (25-30 minutes after the beginning of the lesson and the last minutes of the lesson) with the help of artistic and aesthetic design of screensaver slides or due to appropriately applied animation and sound effects. It is important that at any moment the educator is able to review or briefly reproduce the material, referring to the most difficult places.

Digital technologies, slide shows, video fragments, 3D drawings and models, animations, interactive model-drawings, auxiliary materials (various types of tables, etc.), multimedia presentations are included in the main types of multimedia technologies that have a positive trend for

application in the educational process of a higher education institution, educational and game-based programs, etc. We will describe in more detail the most used of them in the training of future educators in accordance with the aim of our research.

Multimedia presentations are a product that contains images and data accompanied by sound, video, animation (which are three main components of multimedia) and other visual effects [7, p. 110]. The use of such presentations in classes helps to build an educational process based on psychologically correct modes of functioning of attention, memory, humanization of the content of learning and pedagogical interactions, reconstruction of the educational process and its development from the standpoint of integrity. During presentations, educational sessions become emotionally colored and attractive, which arouses the interest of applicants and is an excellent demonstration material that contributes to good performance.

Educational and game-based programs are software tools with the help of which the educator has the opportunity to direct the student's activity at achieving a certain didactic goal in a game form [16]. A certain type of computer games designed specifically for the implementation of didactic goals. Educational and game-based programs have different content: game-based – the recipient receives a "reward" after achieving the game goal; educational and developmental – acquisition and development of knowledge, skills and abilities.

We agree with M. Holovtsova's opinion, who defines a number of multimedia tools that can be used in the preparation of future educators for ecological and valeological education of preschool children [4]:

- general purpose software tools, such as Word, Excel, Power Point. In addition, interactive whiteboard software may be used. These programs provide for the development of various electronic resources on various topics and for various subjects;
- network services are resources on the Internet that provide for the opportunities to create one's own digital resources games, exercises, tests, surveys. Such services include: LearningApps (for creating educational game applications), Google (for developing mental maps), Tilda (preparing longreads), Linoit.com (developing interactive canvases) and many others. Modern network services provide fast and convenient development of own electronic educational resources;
- there are specialized mathematical constructors that solve specific tasks: constructing graphs, performing calculations. Such services include Desmos, Geogebra, MathCad, Wolfram Alpha;
- cloud technologies provide convenient access to common resources (documents, presentations, tables). The most famous cloud services are the Google service, Office 365.

According to the research of T. Zasiekina [10], the following computer tools are most often used. Let's consider them in more detail.

- 1. Software knowledge control systems, which include questionnaires and tests. Their main advantage is fast, convenient, impartial and automated processing of the obtained results. The main drawback is the inflexible system of answers, which does not allow the subject to show his creative abilities.
- 2. Virtual experiment systems software complexes that allow the future educator to conduct experiments in a "virtual laboratory". Their main advantage is that they allow conducting such experiments that would be impossible in reality for reasons of safety, temporary characteristics, etc. The main drawback of such programs is the natural limitation of the model embedded in them, beyond which the person being taught cannot go beyond the limits of his own virtual experiment.
- 3. Educational presentations that are actively used in work. Educational material presented using educational multimedia presentations allows for a short term (time) to present a large volume of learning material due to the concentration of the main ideas of the topic being studied with the help of an interesting presentation, maintaining attention on the material through changing slides, etc. The Power Point program is mainly used to create presentations. This computer tool is interesting in that it can be created by any educator who has access to a computer.
- 4. An electronic textbook is an information system (software implementation) of a complex purpose, which ensures, with the help of a single computer program, without appealing to paper media, implementation of the didactic capabilities of information and communication technologies in all links of the didactic cycle of the educational process: setting the cognitive tasks, presentation of the content of the learning material, organization of the application of initially acquired knowledge (organization of activities for the performance of individual tasks, resulting in the formation of scientific knowledge), feedback, control of students' activities, organization of preparation for further educational activities (setting benchmarks for self-education, for reading additional literature) [13].
- 5. The interactive whiteboard, as a modern means of learning, provides a number of advantages in the organization of the educational process in a higher education institution. It improves presentation of learning material, allowing the educator to actively work with web resources, provides more opportunities for interaction with students and discussion of the studied material in class [13]. In addition, with its use, interactive and traditional methods of organizing educational activities are combined, the interactive whiteboard makes it possible to work with almost any software; implement various methods of individual and collective work of future educators.
- 6. Interactive table (interactive touch table) is a new generation multimedia center that allows several users to freely interact with interactive programs at the same time. The interactive table allows to involve effectively future educators in the educational process. The interactive surface of the table is controlled by touch. In a game form, students learn with the help of developmental programs, which contain sound effects, accompanying video series, logic problems, etc. The interactive table is

considered a revolutionary multi-sensory computer that allows interacting with content in an intuitive way, without using other devices [15].

7. It is advisable to use QR codes in institutions of higher education. It is possible to encode a video from a certain site or an Internet page, a phone number under such a code. For educational purposes, you can: encode links that direct future educators to an educational website with information that helps to solve a specific problem of ecological and valeological education of preschool children; place such codes on information and news stands; use the QR code during the educational process, in the form of coded tasks or a test to check the acquisition of educational material by students, etc. You can use the ClassTools service to create tests. With the help of QR codes, you can also organize various excursions. Many museums use this technology. Guides print out prepared in advance QR codes, place them near certain exhibits, thus further enriching the exhibition with various and interesting information for the visitor (link to photo album, or link to video with this exhibit, etc.). The peculiarity of QR codes is that they are able to store small texts without an Internet connection. Currently, there is a huge number of special programs for reading QR codes (the ReaderKaiwa application is suitable for almost every phone model).

It is worth noting that modernity gave impetus to mass computerization of higher education institutions with involvement of the Internet. It should be noted that the Internet in the educational process will be effective in fulfilling the educational tasks. Let's reveal them in more detail.

- 1. First, the main goal should be to find additional educational information and save it on digital media for further repeated use by different users.
- 2. Secondly, it is possible to search for fundamentally new information, compare it with already known information, i.e., create a problem situation, initiate constructive communication. During the discussion, future educators express their own opinion and attitude to this problem.
- 3. Thirdly, the task may be to make a review (analytical review, report, etc.) on a topic formulated in advance, which can be evaluated as project work.

Next, we will consider the possibilities of multimedia in accordance with the stages of the lesson regarding preparation of future educators for ecological and valeological education of preschool children. Multimedia can be used:

- when explaining new material (color drawings, photos, diagrams, graphs, tables, slide shows, video clips, animations, supporting material, electronic presentations, etc.);
- to consolidate acquired knowledge (tasks with a choice of answers, simulators, virtual laboratory work);
 - for knowledge control (computer testing mainly using the Power Point program).

In order to strengthen knowledge and develop interest in training future educators for ecological and valeological education of preschool children, creative tasks are offered, which can be expressed in:

- 1) making a crossword on the topic, using it to control the knowledge of other applicants;
- 2) drawing up reference schemes and summaries;
- 3) preparation of various messages and reports;
- 4) making presentations.

Digital (color drawings, photo tutorials, photos). The use of this type of technology allows to enrich the knowledge of future educators, unlike standardized teaching manuals, which, due to the increase in cost, cannot contain all the necessary visual material.

Slide show. Implementation of this technology is carried out with the help of an announcer accompanying the demonstrated visual material (photos, drawings, animations). The use of this type of computer technology helps to add emotionality and vividness to the lesson.

Video clips. According to their characteristics, they correspond to educational films and video films, but this type makes it possible to use pauses during the demonstration of a video fragment, copy a frame, enlarge fragments, accompany the viewing of video fragments with written text, summarizing, etc.).

3D drawings and models. Creating a spatial drawing with the possibility of changing the viewing angle, zooming in and out of the object with the effect of magnification replaces a series of drawings, sections and footnotes and allows the teacher to select a particular fragment for comment.

Short animations are "live pictures" that show the short dynamics of the process. They can contain pop-up captions, selection of individual parts, accompanying text of the announcer or be intuitive due to the clarity of the content of the first frame and the name of the object. Story animations are analogues of traditional fragments of "cartoons" and are included in educational films and videos to illustrate the mechanisms of certain processes. They are psychologically attractive due to the use of modern computer design and the possibility of a qualified explanation of the process with the necessary visual accents.

Interactive models are animations, implementation of which depends on the set initial conditions. They can be used to simulate biological processes. Interactive tables can be attributed to this type of objects, when fragments can "come to life" in a short animation or enlarge with the appearance of new details.

Interactive drawings are a simplified version of interactive models. When the cursor is brought to such a picture, a separate object or a part of the object is marked by highlighting or changing color, its name appears.

The auxiliary material covers different types of tables for additional disclosure of the material, determination of values, various formulas. This format allows not to involve the board for additional explanation of the material.

Next, we will consider multimedia, which is advisable to use at the stage of "consolidation of acquired knowledge".

It is worth noting that this stage requires from the teacher of the higher education institution careful preparation of tasks, using a well-thought-out, effective, transparent and understandable for future educators' system for evaluating the results of their activities; implementation of explanatory work for students before the start of work. Involvement of multimedia technologies at the stage of consolidating the acquired knowledge allows for the differentiation and individualization of learning through the use of different types of tasks: test individual/differentiated tasks; theoretical questions, which are verified by involving computer models; practical tasks that determine the depth of understanding of the theoretical material illustrated with the help of computer 3D models.

With the help of multimedia, the teacher has the opportunity to prepare tasks that will cover not only the text version of the question and the choice of the correct answer, but also to diversify such tasks with pictures, photos, video and animation fragments. The main achievement of the use of multimedia at the stage of knowledge consolidation is an increase in learners' study motivation and convenience for the teacher.

As for performing virtual laboratory work, they allow, in addition to consolidating knowledge and practicing skills, to significantly reduce the time for conducting laboratory work and to solve the problem of insufficient material base, if any. Laboratory work is performed in a demonstration mode, although if there is an opportunity to work in a computer class, each applicant can do the work independently. Each subsequent slide contains: a specific task that applicants record in a notebook; drawings (or photos) that they display in the notebook; questions to which they answer in writing. After completion, future educators are given the opportunity to compare their own answers to the questions and are offered to draw a conclusion on the work.

Of course, virtual laboratory works cannot replace ordinary ones, but it is advisable to use them in the study of complex natural processes, setting up experiments that require a long period of time. Furthermore, some processes cannot be simulated in natural conditions, as this requires large time periods.

Work with crosswords. Crosswords allow consolidating or testing knowledge, skills and abilities of future educators in a playing way. The tool uses the capabilities of PowerPoint or Excel programs (answers to the crossword puzzle must be entered in the grid and, if the answer is correct, the font color changes automatically).

At the "knowledge control" stage, it will be appropriate to apply multimedia to improve the process of evaluating students' answers; introduce in the assessment of multi-level and individual approaches to each of them; ensure structuring the teacher's time when checking the knowledge of future educators.

In order to test students' knowledge, the majority of teachers choose a test option, the form of organization of which can be called "choose an answer from the offered options". When working with this type of tests, it is enough to choose the correct answer among other options and press a key. During group work, students can perform tests together (in subgroups) through multimedia tools.

Therefore, the use of multimedia in the preparation of future educators for ecological and valeological education of preschool children allows to increase the effectiveness of the activity of the teacher and learners; to increase the level of assimilation of knowledge of future educators through the involvement of differentiated and individual tasks at various stages of classes (explanation, consolidation of acquired knowledge, control of knowledge); with the help of the presented technologies (slide shows, video fragments, 3-D drawings and models, short animations, interactive models, interactive drawings, work with simulators, performing virtual laboratory and scientific works, multimedia presentations) to enrich the lesson with the detailing of objects and natural phenomena, bring to the fore the most important (from the point of view of educational goals and tasks) their characteristics.

REFERENCES

- 1. Aronova, R. S. (2016). Formation of professional competence of future specialists in preschool education in pedagogical colleges (PhD thesis). Zaporizhzhia.
- 2. Bielienka, H. V. (2012). Modern approaches to the formation of professional competence of future educators of preschool children. *Updating the content, forms and methods of teaching and upbringing in education institutions, 5,* 99-102.
- 3. Busel, V. T. (ed.) (2005). A large explanatory dictionary of the modern Ukrainian language. Kyiv: Irpin: VTF "Perun".
 - 4. Holovtsova, M. (2016). Use of ICT at biology lessons. *School director*, 11, 13-15.
- 5. Horun, M. V., Pyrih, H. I., Faifura, V. V., Fedirko, M. M. (2019). *Ecology: a study guide*. Ternopil.
- 6. Dubaseniuk, O. A., Semeniuk, T. V., Antonova, O. Ye. (2003). *Professional training of the future teacher for pedagogical activity: monograph.* Zhytomyr.
- 7. Zabolotnyi, V. F. (2009). Formation of teacher's methodological competence by means of multimedia: monograph. Vinnytsia.
- 8. Law of Ukraine "On Higher Education" No. 1556-VII dated July 1, 2014. URL: http://zakon3.rada.gov.ua/laws/show/ru/1556-18.

- 9. Zaleskyi, I. I., Klymenko, M. O. (2005). *Human ecology: a textbook*. Kyiv.
- 10. Zasiekina, T. M. (2011). Problems of improving the content of school physical education. *Bulletin of Chernihiv National Pedagogical University*, 89, 75-78.
- 11. Zasluzhena, A. A. (2016). *Master's training in Ukrainian language and literature at the universities of the Swiss Confederation* (PhD thesis). Sumy.
- 12. Ivanchuk, S. A. (2020). Environmental education of preschoolers in the context of its current definitions. *Pedagogy of creative personality formation in higher and secondary schools, Vol.* 2, 70, 54-58.
- 13. Korsunska, L. M. (2016). The concept of smart education: general education, digital textbooks and smart schools. *Education and development of gifted personality*, *11*, 77-80.
- 14. Kurok, O. I. (2007). The readiness of future educators of preschool education institutions for physical education of preschoolers. *Pedagogy, psychology and medical and biological problems of physical education and sports, 3,* 67-72.
- 15. Myslytska, N. A. (2016). An active approach in the formation of methodological competence of the future teacher. *Bulletin of Chernihiv National Pedagogical University, Issue 138*, 104-107.
- 16. Plastiuk, A., Hudakova, V. (2016). Use of information and computer technologies. Biology. *School World*, *4-5*, 38-41.
- 17. Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference (1946). New York.
- 18. Repeta, S. R., Dzhura, N. M. (2022). Environmental education of children of senior preschool age in the conditions of a preschool education institution. *Innovative Pedagogy, Issue 50, Vol. 1*, 199-203.
- 19. Sadova, T. A. (2010). *Professional and pedagogical training: definitive analysis of the problem.* URL: http://ps.stateuniversity.ks.ua./file/issue_51/77.pdf
- 20. Dictionary of the Ukrainian language. Academic explanatory dictionary (1970-1980). URL: http://sum.in.ua/.
- 21. Sokol, I. M. (2016). Preparation of teachers for the use of quest technology in the system of postgraduate education (PhD thesis). Zaporizhzhia.
 - 22. Stepanov, O. M. (ed.) (2006). Psychological encyclopedia. Kyiv.
- 23. Tanko, T. P. (2004). Theory and practice of music-pedagogical training of future teachers of preschool institutions in pedagogical universities (DSc thesis). Kharkiv.
- 24. Tukach, I. I. (2012). Professional training of future specialists in preschool education to acquaint preschoolers with their rights and responsibilities. *Scientific Notes of Mykola Gogol Nizhyn State University*, *6*, 204-208.
 - 25. Yahupov, V.V. (2002). Pedagogy: study guide. Kyiv.

THE POTENTIAL OF EVENT TECHNOLOGY IN THE PROCESS OF FORMING THE CORPORATE CULTURE OF HIGHER EDUCATION STUDENTS

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Summary

The article summarizes the scientific approaches to the problems of applying event technology in the educational process, particular in the process of forming the corporate culture of student body.

The author analyzes the views of scientists on the essence of the concepts such as "event" and "event technology", "corporate culture", determines the place of corporate culture in the activities of the team, considers the types of corporate culture, principles and functions, and pedagogical conditions of the process of forming the corporate culture of higher education students. A theoretical model of the process of forming corporate culture using event technologies is proposed as a pedagogical tool. The model is based on the implementation of each function of corporate culture through the use of certain event technologies.

The results of a questionnaire survey of second-year students of Sumy State Pedagogical University named after A.S. Makarenko are presented, which indicate the answers to questions related to determining the level of satisfaction with being in the team, the feeling of favorable psychological climate and the impact of event technologies on the level of corporate culture of the student team.

Keywords: event, event technology, culture, corporate culture, types of corporate culture, principles of corporate culture, types of event technologies.

Introduction

The relevance of our study is due to the fact that event technologies are developing quite rapidly nowadays and are used in many areas of life. Events are becoming an integral and necessary part of everyone's life in modern conditions. In particular, the educational sector has developed a certain system of events and even event networks that are widely used in solving educational problems.

Corporate culture is important for improving the key capabilities of organizations and their functioning. Corporate culture is a necessary tool for creating a positive image of an educational institution, achieving a high level of psychological involvement of students in academic and extracurricular activities, and ensuring the efficiency of the institution as a whole. We aim to study the impact of event technologies on the formation of corporate culture of higher education students.

Purpose, subject and methods of the study

The purpose of our study is to reveal the educational potential of event technology and its practical implementation in the process of forming the corporate culture of higher education students.

The subject of the study is the event industry as a resource for the formation of the corporate culture of higher education students.

To achieve this goal and solve the tasks, the following research methods were used: theoretical: analysis of philosophical, sociological, pedagogical, psychological literature to highlight the state of the research problem; modeling for the purpose of forming the corporate culture of higher education students based on "event technology"; questionnaire method.

Research results

The concept of "event" is supported by the research of well-known foreign authors, such as: R. Moser, B. Knause, M. Saunder, J. Goldblatt, D. Wilkinson, D. Rogers, E. Yettinger, U. Halzbaur, M. Zeller, B. Schmitt, et al, nowadays is not only an independent direction in event communications, but is understood not just as a mass, personal or informational event, but as a whole pedagogical process that can be studied as a structure based on specific principles of managing the dynamics of a higher education institution and the development of a student's personality, providing that real events are created and lived in the life of a team and an individual.

An event is seen as a process during which a special event is planned, prepared, and created. It includes data collection, analysis, evaluation, situation identification, coordination and management, time control, finances, facility conditions, other resources, including identification of event participants, and other specifications in accordance with the target guidelines of the process under study.

The event is also interpreted as events that influence the development of the education system, the formation of subjects of educational networks, the educational space of a certain territory, etc.

Event technology means transforming an event with the help of subsidiary effects into something absolutely exceptional from the visitors viewpoint. [Radionova O.M.]. An event is an event that is the beginning, part or result of the implementation of a program that has a specific focus: educational, leisure, creative and activity. It should carry an educational load, promote moral and cultural values, and contribute to the formation of corporate culture.

Event technology involves the use of several approaches to event management and organization of corporate activities in an educational institution.

- 1. The event approach, the organization of unique events (B. Knause, U. Halzbaur, M. Zeller, E.A. Luneva, etc.), is presented as a technology for implementing unique events aimed at satisfying, first of all, personal requests and desires.
 - 2. The technological approach involves building a system of criteria and measures for the

conditions of a particular event.

- 3. Student-centered, the essence of which is that the central part is the personality and the process of its activation, self-realization for the discovery of its creative potential.
- 4. The social and psychological approach includes the management of an individual's emotions, behavior and desires, the creation of an event with the effect of significance for the individual.
- 5. Corporate approach. Development of the theory of the event approach in the system of corporate communications as an alternative educational system.

The corporate environment of a student group is a base area of an individual's life, which provides professional self-realization, recognition, self-affirmation, promotes a sense of community and meaningful guidelines for educational activities. Social, psychological, pedagogical, cultural and symbolic attributes of the environment are components of corporate culture. Within the framework of corporate culture, certain patterns of behavior are formed and disseminated, aimed at team building, integration of participants in the educational process, development of motivation, personal and group responsibility for achieving the goal and solving corporate tasks. Nowadays, corporate culture is considered as a strategic tool that helps to orient the entire team to achieve common goals, mobilize employees' personal initiative and ensure productive interaction at all levels.

Corporate culture is a set of certain ideas, values, standards of behavior, attitudes and ways of conducting professional activities that should be shared by all members of the institution. This culture can also be seen as a tool for the strategic development of the student body by stimulating innovation and leadership within it. Corporate culture is vital for developing and maintaining the level of employee commitment and intensity that is often characteristic of successful organizations [Отенко, 2018]. Corporate culture is important for improving the key capabilities of organizations and their functioning.

The following types of corporate culture are distinguished.

- 1. 'Baseball team'. Employees feel free to find work elsewhere with ease.
- 2. 'Club culture'. The staff is quite dedicated and well-coordinated. It is characterized by effective teamwork.
- 3. 'Academic culture. Stable working conditions allow employees to improve their knowledge and skills. Provides for gradual career growth of employees within the company.
- 4. 'Fortress culture'. Employees are not sure about their future in the company, but there are great career opportunities for those with special skills.

To ensure the effectiveness of the process, it is advisable to adhere to the following principles of corporate culture formation.

1. Socio-economic and intellectual development. This principle implies that corporate

culture is focused on ensuring appropriate economic prosperity, social and intellectual development of all employees of the enterprise.

- 2. Comprehensiveness and consistency. It provides for the formation and development of corporate culture from the point of view of covering all employees, phenomena, elements and processes that ensure the company's activities.
- 3. Measurability and usefulness. Corporate culture at an enterprise should ensure its effective operation. That is why the principle of measurability will provide a set of qualitative and quantitative parameters for assessing the level of corporate culture and the nature of its impact on financial, economic, etc. performance indicators of the enterprise. Corporate culture should perform the function of usefulness for both people and the enterprise.

In the generally accepted approach, the following functions of corporate culture are distinguished: a) the function of adaptation of the organization to the external environment (external adaptation); b) the function of internal integration.

For the educational process, we consider the following functions of corporate culture to be more appropriate.

- Shaping the image of the organization, where the corporate culture is manifested through the values that the organization maintains not only internally but also relays externally. It is easier for customers to form an opinion about a company by looking at and understanding the company's values and principles. And to avoid mistakes, misunderstandings and unmet expectations in the course of cooperation.
- Corporate culture, through its mission, history, and traditions, supports the company's values, enshrines them in the worldview of each employee, thereby setting guidelines and standards of behavior within the company, carrying out the so-called 'collective programming'.
- Promoting the socialization of new employees. The socialization of a new employee is largely related to how successfully he or she will be able to 'fit in' with the existing culture, or accept it.
- Establishing norms and rules of behavior. Corporate culture plays the role of an informal 'set of rules' that defines acceptable and unacceptable behavior within an organization. A strong corporate culture makes it easier to manage, reduce the number of formal orders and instructions, and minimizes the need for supervision.
- Creating a sense of belonging to a common cause among employees, it also helps to identify the employee with the company, builds commitment and loyalty. People feel to be a part of a single system that gives meaning to their work. The level of responsibility increases, and thus the quality of achieving goals.' (Zhuravleva, 2015, pp. 25-26)

Cognitive - aimed at learning about the culture at the stage of employee adaptation to the

organization and thus facilitating their comfortable and natural inclusion in the team life.

- Communicative, as it ensures mutual understanding and interaction between employees through the values adopted in the organization, behavioral norms and other elements of culture.
- Educational and developmental mastering culture creates additional knowledge and has a positive impact on its activities.
- Normative establishes standards of acceptable behavior in the organization. Protective culture serves as a barrier to the penetration of undesirable trends.

Integrating - the adoption of corporate culture forms a community of people, they feel to be a part of a single system.

Substitutive - a strong culture reduces the flow of formal orders and instructions.

Motivational - adoption of culture usually creates additional opportunities for a person [Babych, 2003, p. 449-456].

Today, corporate culture is one of the most powerful management tools. The impact of corporate culture on the efficiency of the team should be considered in terms of its compliance with the overall strategy of the institution.

Thus, the content of the corporate culture of students formed on the basis of the realization of the pedagogical potential of the event includes the following components:

- a) pedagogical principles of the event:
- the meaningful value of the learning process through the event, its problematic proportionality to real life;
- expediency and complementarity of tasks, forms, methods of self-realization, professional growth through the event dominant;
 - the principle of cultural conditioning of personal development;
 - personal significance of a particular phenomenon or event;
- the principle of realization of educational potential (event technology as a specific pedagogical phenomenon and as a means of forming corporate culture);
 - b) reliance on the main provisions of the theory of disposition, according to which the behavior of an individual in a leisure activity is structured by means of specific scenario-directing techniques into hierarchically organized actions, in particular, the reaction of the situational community of participants to the subject-event situation that is relevant for them, which is in the form of elementary behavioral acts;

This is the subject-event situation, which takes the form of elementary behavioral acts;

- c) instrumental support for the phases of educational influence, taking into account the personal characteristics and capabilities of students:
- building events on the basis of event technologies, using specific communication, event,

management techniques that allow for a comprehensive impact on the rational, sensual and behavioral spheres of the individual in the team;

- to ensure the initiative of the individual in the context of the event and, thus, to implement the fundamental pedagogical principle of education in activity, for activity, through activity.

As a pedagogical tool, we propose a theoretical model of the process of forming corporate culture through event technologies. The model is based on the above-mentioned functions of corporate culture and options for event technologies to implement each function. The results are presented in Table 1.

Table 1: Model of corporate culture formation using event technologies.

Functions of corporate culture	Types of event technology
Shaping the organization's image	Presentations;
	Exhibitions (advertising, thematic, personal);
	Concerts;
	Competitive events (competitions, contests,
	festivals, olympiads, relay races).
Collective programming	Excursion; training; festival.
Creating a sense of belonging to a common	Concert; presentation;
cause, identification with the company, building	competitions.
commitment and loyalty	
Cognitive	Flash mob;
	excursion;
	exhibition.
Communicative	corporate party;
	freak show;
	carnival.
Educational and developmental	Exhibitions; festivals; training.
Normative	Concert; training;
	festival; intellectual game.
Security	Club day; competitive events; lectures.
Integrating	Open day; corporate party; promotional event
	competitive events.
Substitute	Festival; concert; exhibitions; presentations.
Motivational	Corporate party; freak show; carnival;
	flash mob.

The purposeful provision of socio-pedagogical functions of corporate culture is an important task, the solution of which depends on the potential of the environment of higher education students, their meaning-forming, normative and compensatory capabilities, which allow blocking the adverse effects of internal and external environment factors.

Event technologies are the most important socio-pedagogical resource in the process of forming the corporate culture of the student group, and the pedagogical potential is manifested in the following essential characteristics: socio-cultural, systematic, corporate continuity, socio structural, organizational, traditional, ritual and regulatory conditionality.

These characteristics are interrelated and are in continuous interaction, aimed at the comprehensive development of students' personality in the corporate environment.

The use of event technology resources in the formation of corporate culture will be effective if the following pedagogical conditions are met: a) the event's compliance with the concept and specifics of the educational institution; b) understanding the developing nature of the corporate event, which is the technological basis for effective socialization and self-realization of students through the event; c) the demand for the communicative and creative potential of special events that underlie corporate events; d) organization of the student collective as a social and pedagogical space for personal growth and professional realization of the individual, creation of conditions for optimizing the internal collective psychological climate, which occurs through the integration of event technologies into the structure of interpersonal communications, and significantly deepens the understanding of the essence, organizational nature and pedagogical potential of event technologies.

Thus, the socio-cultural environment of the student body can be considered as a space for the effective formation of corporate culture if the pedagogical possibilities of this environment are implemented subject to the following requirements: a) creation of a favourable communication space for the life of the student body; b) formation of corporate ethics; c) stimulation of creative and professional initiatives of students; d) saturation of the environment of the educational institution with corporate traditions and style that forms professional identity.

For a more thorough analysis of corporate culture and understanding of the essence of the problems existing in the student body, a survey was conducted among second-year students of Sumy State Pedagogical University named after A.S. Makarenko. A questionnaire was developed to answer the following questions related to determining the level of satisfaction with learning in the team, the perception of a favourable psychological climate and the impact of event technologies on the level of corporate culture of the student team. Respondents were asked to answer several questions. A total of 31 students took part.

Here are the results of the survey in the form of a table.

Table 2. Results of the student survey.

Question	Answers.
1. Does the group learning meet	Yes - 27 students. No - 1 student.
your expectations?	Difficult to answer - 3 students.
2. Select the factors that you	The amount of future salary does not correspond to the amount of
dislike most about the team	academic work - 4.
(select no more than 3 options).	1. I am not satisfied with the educational process.
	2. The place of study is far from the place of residence.
	Uniformity and monotony in the
	educational process - 29.
	4. The amount of academic workload is very high - 26.
	5. Overexertion during study (fatigue).
	6. Disrespectful, rude attitude of teachers - 2.
	7. Lack of mutual assistance and understanding in the team - 1.
	8. Lack of conditions for personal and professional growth - 2.
	9. Lack of attention, approval and objective evaluation of work by
	teachers - 5.
	10. Lack of conditions for deepening education.
	11. Difficult learning conditions (please specify)
	12. Other
3. How would you assess the	. Students feel comfortable, relations in the team are friendly,
psychological climate in your	anyone can count on help and understanding - 29.
team?	. Relationships are friendly in the team, but teachers cause tension.
	. The team interacts harmoniously, but in extracurricular time the
	relations are formal - 2.
	. The team is divided into groups that do not interact with each
	other.
	. Students are constantly in conflict with each other, which
	significantly reduces the effectiveness of joint work.
	. It is difficult to answer.
4. How important is it for you	Very important - 31.
to work with people who get on	Not very important.
well with each other?	
5. What kind of events held in	Sports events - 1
your educational institution	Environmental activities
have a positive impact on the	Corporate parties
corporate culture? Please	Presentations
select no more than 3 options.	Exhibitions
	6. Concerts
	Festivals Excursions
	Trainings Disco
	All of the above - 30
	All of the above - 30

Source: Own research of the academic year 2023-2024 on the basis of Sumy State Pedagogical University named after A.S. Makarenko.

The analysis of the results is based on student responses.

To the question 'Does studying in a group team meet your expectations?' 87% of all respondents answered 'Yes', 3.22% - 'No', and 9.67% - 'Hard to answer'.

Among the factors that students dislike the most in the group, they chose the following: 'The amount of academic workload is very high' - 83.8%, 'Uniformity and monotony in the educational process' - 93%, 'The amount of future salary does not correspond to the amount of academic work'

- 12.9%, 'Disrespectful, rude attitude of teachers' - 6, 4%, 'Lack of conditions for personal and professional growth' - 6.4%, 'Lack of mutual assistance and understanding in the team' - 3.22%, 'Lack of attention, approval and objective evaluation of work by teachers' - 16.1%. In other words, we have determined that one of the most unpleasant factors is monotony.

The following answers were received to the question 'How would you assess the psychological climate in your team?' 'Students feel comfortable, relations in the team are friendly, anyone can count on help and understanding' - 93.54%, 'The team interacts well, but outside of school hours the relations are formal' - 6.45%.

The question 'How important is it for you to work with people who interact well with each other?' was answered with a 'Yes'.

The following answers were received to the question 'What kind of events held at your educational institution have a positive impact on the corporate culture?' 'Sporting events' - 3.22%, 'All of the above' - 96.77%.

The results of the survey demonstrated a fairly high level of corporate culture of the student body, friendliness, readiness for mutual assistance and support. In the leisure sphere, students noted the high impact of various forms of collective activities, expressed their willingness to participate and spend their free time together. As for the level of satisfaction with the team, this issue is ambiguous and requires additional research and attention from curators. It was also found that the events held in the team and the educational institution have a significant impact on the level of corporate culture, namely, strengthening ties and relationships between students.

Conclusions.

As a result of the study, the following tasks were solved.

The theoretical aspect of the analysis of event technology and corporate culture is presented. In fact, corporate culture is a set of beliefs and behaviour of the team, it is the definition of mechanisms of interaction between all team members and management. Corporate culture affects the state of the team, each student and their productivity, and the educational institution.

The article analyses the corporate culture of second-year students of Sumy State Pedagogical University named after A.S. Makarenko. Using the questionnaire method, a fairly high level of corporate culture of the student body, friendliness, readiness for mutual assistance and support was

revealed. It was also found that the events held in the team and the educational institution have a significant impact on the level of corporate culture, namely, strengthening ties and relationships between students.

Thus, in an environment of instability, it is necessary to strive for a sense of safety, security and stability. And the use of event technologies contributes to the formation of corporate culture. In our opinion, it is necessary to regularly analyse the level of corporate culture and, if necessary, adjust it. One of the most effective ways to improve corporate culture is through event technologies, which can be used to change and adjust the behaviour of students in the team, as well as to instil traditions, rules of conduct and a system of values not only in the team but also in the entire higher education institution.

REFERENCES

- 1. Babych O., (2003). Osnovni zasady stvorenja korporatyvnoi kultury yak 83 instrumentu upravlinnia // Visnyk Ukrainskoi akademii derzhavnoho upravlinnia. №2 s. 449-456.
- 2. Radionova O.M. Ivent-turyzm: poniattia, sutnist, funktsii. Stratehichni imperatyvy rozvytku turyzmu ta ekonomiky v umovakh hlobalizatsii : materialy Mizhnarodnoi naukovo-praktychnoi konferentsii, prysviachenoi 10-richchiu fakultetu mizhnarodnoho turyzmu ta upravlinnia personalom Zaporizkoho natsionalnoho tekhnichnoho universytetu, m. Zaporizhzhia, 30–31 bereznia 2017 r. : v 2 t. Zaporizhzhia : Prosvita, 2017. T. 1. S. 298–300.
- 3. Oleksenko Ya.A., (2019) Sotsialno-ekonomichnyi zmist ta peredumovy stanovlennia korporatyvnoi kultury na pidpryemstvo. Naukovyi visnyk Khersonskoho derzhavnoho universytetu. http://www.ej.kherson.ua/journal/economic_33/25.pdf
- 4. Otenko I. P., Chepeliuk M. I., (2018) Korporatyvna kultura: mizhnarodnyi ta transformatsiinyi aspekty: monografiia [Elektronni resurs] / Kharkiv: KhNEU im. S. Kuznetsia
- 5. Vineet, G. Event-Management and Planning: a complete guide to plan and execute the event. LAP Lambert Academic Publishing, 2012. 252 p.

THE POTENTIAL OF VISUAL TECHNIQUES IN CORRECTIVE WORK WITH PRESCHOOL CHILDREN WITH SEVERE SPEECH IMPAIRMENTS

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Summary

The article explores the pivotal role of digital visualization techniques in enhancing speech therapy for children with severe speech disorders. It begins by highlighting the benefits of integrating computer technologies into speech therapy practices. These benefits include enabling individualized approaches tailored to each child's needs, boosting motivation through interactive multimedia elements, and providing access to a rich array of visual materials in digital formats.

The article reviews existing research that underscores the value of visual materials in educational settings, emphasizing their particular importance for children with special needs. However, it identifies a gap in research specifically focused on studying digital visualization techniques for children with severe speech disorders, which prompted the authors to conduct their own scientific investigation on this topic.

The article examines various visual teaching methods employed in speech therapy, such as the use of visual aids, technical teaching aids, and the technology of visualizing educational information. It discusses the pivotal role of visualization tools in enhancing the effectiveness of speech therapy, attributing their efficacy to their ability to engage multiple sensory channels simultaneously and facilitate better learning, especially for preschoolers who primarily rely on visual-figurative thinking.

The article provides an overview of specialized digital programs and applications that leverage visual elements, including pictograms, animations, and interactive exercises, to support communication skills, speech development, and language learning for children with severe speech disorders.

Two promising visualization techniques are explored in depth: infographics and scribing. Infographics is described as a method of presenting information through visual images, combining visuality and cognitive functions. The article discusses the benefits of using infographics in group and individual speech therapy sessions, such as capturing and sustaining children's attention, facilitating memorization of material, and fostering creativity and analytical thinking.

The article also delves into mnemonics and mnemo-tables, a specific type of infographic used for memorization through associations and visual images. It explains how interactive mnemo-infographics, combining the advantages of mnemonics, infographics, and digital technologies, can be created and used to develop speech, memory, thinking, and cognitive skills in children with disorders, in an engaging and playful manner.

Scribing, the process of visualizing content through drawings created in parallel with narration, is presented as another promising visualization technique. The article details different types of scribing (drawn, application, magnetic, flannel board) and their suitability for various age groups and cognitive levels of children with severe speech disorders.

The article concludes by emphasizing the pivotal role of modern digital visualization technologies, such as infographics, scribing, and interactive mnemo-materials, in making the speech therapy process more visual, engaging, and effective for children with severe speech disorders. By incorporating these techniques, therapists can contribute to better correction of speech disorders and maximize the potential for speech and communication development in this population of children.

Key words: digital visualization speech therapy infographics, mnemonics, scribing, interactive mnemo-infographics, preschoolers

Introduction

The active integration of computer technologies into educational practices has become an instrumental step towards enhancing the effectiveness of teaching methods and modernizing the learning process. Speech-language pathologists in educational settings recognize the advantages of information and computer technologies (ICTs) and actively incorporate them into their professional work. The utilization of computers in speech therapy practice opens up new opportunities for working with children who exhibit speech development disorders.

Firstly, computer programs enable the simultaneous engagement of multiple children in therapy sessions while providing an individualized approach through the variability of tasks at different levels of complexity. Secondly, multimedia content, vibrant visual effects, and interactive elements contribute to activating children's voluntary attention and increasing their motivation to learn. Furthermore, computer technologies significantly expand the toolkit of speech-language pathologists, providing access to a vast repository of visual material in digital format, including images, animations, and videos.

Thus, information and computer technologies are becoming an integral component of modern speech therapy practices, ensuring individualization, interactivity, and multisensory learning experiences.

The value of visual materials in educational practices

The issue of utilizing visual materials in educational settings has been extensively studied by numerous researchers, including O. Bilier, V. Butenko, L. Bilousova, T. Halytska-Didukh, I. Lipechevska, S. Lytvynova, O. Sokoliuk, N. Khmil and others.

The application of computer programs has been covered in the works of A. Byrchenko, A. Karnaukhovoi, O. Lieontievoi, I. Rozenkvit and others.

Within the field of general pedagogy, the topic of information visualization has been presented in the research of D. Bezuhloho, L. Bilousovoi, N. Biloshapky, M. Drushliak, N. Zhytienovoi, V. Imber, I. Lipchevskoi, N. Liashovoi, O. Semenikhinoi and others. In the realm of special education, the issue of visualization has been explored by M. Derhach, H. Honchar, A. Kurienkova, T. Kolomoiets, K. Ostrovska, Yu. Sidenko, T. Skrypnyk, V. Pavliukh and others.

The use of visualization and computer technologies is particularly relevant in speech therapy work with children exhibiting severe speech disorders. Educational computer programs provide real opportunities for delivering high-quality individualized education to this category of children. Their utilization positively impacts the motivation of preschoolers, the effectiveness of therapy sessions, and accelerates the process of correcting speech disorders.

The significance of information visualization information visualization plays a crucial role in the learning process, as visual perception is one of the primary sources of data input to the human brain. The human brain better comprehends information presented in the form of images and illustrations compared to textual material. Therefore, there is an urgent need to develop new, effective visualization methods to optimize the learning process, particularly for children with special educational needs.

Research Objective

The analysis conducted has revealed an insufficient number of studies devoted to digital visualization in working with children with special educational needs, namely those with severe speech disorders. This gap prompted the undertaking of scientific research within the scope of this article.

Visual teaching methods in speech therapy

In speech therapy work, a wide range of methods, techniques, and approaches are employed, aimed at preventing and correcting speech disorders in children. One of the most common and effective methods in the pedagogical process is considered to be visual learning.

Visual teaching methods involve a significant reliance on the use of visual aids and technical teaching aids to facilitate the mastery of learning material. This method is one of the oldest in pedagogy, yet it remains relevant, especially in modern education. Notably, speech-language

pathologists actively apply the technology of visualizing educational information in their professional activities.

Visualization tools play a crucial role in increasing the effectiveness of speech therapy work with children exhibiting severe speech disorders. Visualization is a visual means of presenting any information, relying on visual imagery, which facilitates better mastery of the material by children. When working with preschoolers, visualization plays a particularly important role since visual-figurative thinking is dominant at this age. The use of visual elements aids the child in better understanding and assimilating educational material, as they receive information simultaneously through multiple sensory channels – visual and auditory. This ensures stronger reinforcement of knowledge and skills in memory.

The Advent of Digital Visualization Technologies

The development of the modern information society necessitates the intensive implementation of innovations, new technologies, and methods of working with children in the preschool education system. While there exists a wide range of traditional ways to visualize educational activities, such as diagrams, tables, drawings, video fragments, and infographics, digital programs and applications capable of becoming powerful tools in speech therapy work with children exhibiting severe speech disorders are becoming increasingly prevalent.

Modern visualization software solutions enable the creation of individualized materials, taking into account the special needs of each child. This facilitates better information perception, development of communication skills, and more effective correction of speech disorders in children with severe speech disorders.

Specialized Digital Programs and Applications

A wide range of specialized programs and applications utilizing visual elements for improving communication skills and speech development in children with severe speech disorders is available on the market.

Among the programs, TalkLink AAC stands out, providing alternative and augmentative communication using visual symbols for information exchange in children with severe communication disorders. PECS Express teaches the Picture Exchange Communication System (PECS), which involves exchanging images for communication with non-verbal children exhibiting severe speech disorders and developing their communication skills. Boardmaker allows for the creation and utilization of sets of pictograms and visual schedules to support communication, structure activities, and the child's environment for those with severe speech disorders. Speech Blubs develops speech comprehension and production in children with severe speech disorders using visual

materials (pictures, animations) and audio. Proloquo2Go provides alternative communication using panels with pictograms and voice support, visualizing speech. Linguarama focuses on language learning (including native language) through visual perception, using pictograms and graphic symbols.

Among the applications, AAC Chat is noteworthy, as it enables social communication online through the exchange of visual symbols for children with communication disorders. Speech Banana facilitates vocabulary learning and sound articulation practice through word and video visualization. TalkieToys provides vocabulary and phrase acquisition for children with severe speech disorders using animated images and audio. My Talking Tom allows communication with a virtual assistant through sets of pictograms, visualizing conversational skills. Seeing Stars develops basic speech skills and phonemic perception using visualization of symbols and signs. Speechy «brings» speech to life by visually animating words spoken by the user. TouchChat visualizes communication through pictograms and phrases, facilitating the development of social interaction.

Most of the listed programs are aimed at developing communication skills, alternative communication, and speech support for non-verbal and verbal children with severe speech disorders. They utilize visual symbols, pictograms, and animations to facilitate the perception and assimilation of speech material, the formation of lexical-grammatical categories, and the automation of sound articulation. The applications also contribute to vocabulary learning, the development of basic speech skills, «bringing speech to life,» and ensuring social interaction. They are unified by the use of visualization to expand the communication capabilities of children with severe speech disorders.

These software solutions can assist children with speech development disorders in forming various speech skills, including:

- expanding vocabulary
- constructing sentences
- practicing clear articulation
- developing reading and writing skills.

The use of visual support is particularly useful for children with speech disorders who experience difficulty mastering abstract concepts or communicating due to language barriers. The utilization of visual symbols will aid in better understanding the requirements and make the learning process more engaging and interesting.

Infographics as a promising visualization technique

One of the modern and understudied ways of visualization in speech therapy work with children exhibiting severe speech disorders is infographics.

Infographics is a method of presenting information through visual images. It has existed since ancient times, as evidenced by the cave paintings of primitive people. Infographics combines visuality and a cognitive function, allowing preschoolers to form a holistic understanding of objects and phenomena. The use of infographics while examining various aspects of certain objects helps children distinguish between primary and secondary elements, contributing to the development of creative thinking.

The use of infographics by a speech-language pathologist in working with children with speech disorders is quite simple and convenient. The speech therapist can display static or interactive digital infographics on an interactive whiteboard, display screen, or print it out. Such visual material can be utilized both during group speech therapy sessions and in individual work with a child.

The use of digital infographics with interactive elements allows the speech therapist to diversify the sessions, making them more dynamic and engaging for children. For example, animated processes can be demonstrated, hyperlinks can be followed, and elements of the infographic can be interacted with.

Bright, colorful images of static and animated infographics allow for quickly capturing and maintaining the attention of preschoolers. Children of this age better perceive visual information than verbal. Therefore, the visualization of speech material using infographics is a highly effective technique in speech therapy work.

During a group session, the infographic can be displayed to all present children. This will enable the speech therapist to explain new material in an interesting visual form, relying on vivid pictures, diagrams, and animations of the infographic. Children will be better able to understand and assimilate the explanations when reinforced with visual images.

In individual work, the speech therapist can utilize printed sheets or display digital infographics to practice various skills with a particular child. Visualization will aid in better understanding instructions and maintaining attention.

The speech therapist can also involve children in creating their own infographics using special programs and online services. This will develop creativity, analysis skills, structuring, and information visualization capabilities.

The infographics method helps to organize an engaging speech therapy session and increase children's motivation to complete tasks. One picture can be expanded into a story, involving the child in active conversation and developing their speech skills. Bright images, diagrams, and pictograms attract the child's attention, facilitate information perception, and make the learning process engaging. This unique approach with the use of visual elements quickly grabs children's attention, stimulates them to reflect, fantasize, and tell their own stories. This contributes to better memorization of the material and the acquisition of new knowledge, as the information is presented in an interesting and

accessible form. Infographics also helps develop logical thinking, increases interest and motivation of children to learn, which is a key factor for success in speech therapy work.

Thus, the use of static and interactive digital infographics in speech therapy work has many advantages - visuality, brightness, multimedia, and the involvement of different perception channels. This renders the speech therapist's sessions modern, interesting, and effective, contributing to better results in correcting speech disorders in children.

To create infographics, computer programs and online services are utilized. The most popular and simplest ones include PowerPoint, ActivInspire, Infogr.am, Piktochart.com, Prezi.com, and Datawrapper.de. These tools offer varying levels of functionality and complexity, catering to both beginners and professionals in infographic creation.

Mnemonics and Mnemo-Tables

In speech therapy work with children, one of the widely used types of infographics is mnemonics - a technique for memorizing information through associations and visual images. The most demanded type of infographics in speech therapy is precisely mnemonics, which facilitates rapid assimilation and reproduction of material by creating vivid associative connections.

Mnemonics are actively used for memorizing poems, developing coherent speech using supporting pictures and diagrams. Modern information and communication technologies allow this area of work to be taken to a new level by creating interactive mnemo-posters and mnemo-tables. By choosing a certain type of mnemonics (squares, paths, tables) and using computer programs or online services, a speech therapist can develop a convenient interactive didactic tool, absolutely free of charge.

Mnemo-tables should visually represent the content of a future story, poem, or tale in a series of symbolic pictures. This also helps children with speech disorders form clear associative connections between verbal and visual information. The vivid images of the mnemo-tables activate the child's imagination, facilitate the memorization of new words, and contribute to the development of coherent monologue speech.

During corrective work, speech therapists utilize mnemo-tables as an effective tool for forming and improving speech skills in children. Speech therapists involve mnemo-tables when teaching children to compose descriptive stories about objects, developing retelling skills, and memorizing poems, guessing and composing riddles.

In speech therapy sessions, mnemo-tables of varying complexity with pictograms and schematic drawings are used, reflecting the characteristic features of objects, key moments of the plot, or lines of poems. Under the guidance of a speech therapist, children learn to analyze visual cues

on mnemo-tables, identify the main features of objects, restore the sequence of events, memorize and reproduce texts, relying on associations between words and graphic symbols.

The use of mnemonics is particularly effective for children whose speech consists only of simple sentences and phrases, with difficulties in constructing complex syntactic structures; children with a poor vocabulary; children who have problems formulating questions and answers; and children with diction and sound disorders. Mnemo-tables aid these children in developing coherent speech, enriching their vocabulary, learning to build logical chains and coherent stories.

Combining visual and verbal methods makes the process of correcting speech disorders interesting and engaging for children. The vivid visual images of the tables contribute to better memorization of the material and form associative connections between words and their graphic representations. Children are actively involved in creating their own mnemonics, which contributes to the development of their imagination, creativity, and speech activity.

The use of interactive mnemo-infographics in classes allows children to be activated, increasing their attention and interest. Interactive mnemo-materials are distinguished by their bright, aesthetic design, and interactivity of transitions, animations, or presentation of infographics significantly increases the motivation of preschoolers to learn. Children better perceive and remember information when it is presented in the form of vivid images with elements of interactivity.

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In modern speech therapy practice, interactive mnemo-infographics are widely used to develop various speech and cognitive skills in children. Interactive mnemo-tables can be presented on interactive whiteboards or tablets, allowing the child to actively participate in the learning process by manipulating the visual elements, revealing new information, or completing tasks.

One of the advantages of using interactive mnemo-infographics is the ability to gradually reveal information, maintaining the child's attention and curiosity. For example, a mnemo-table can initially show only pictograms or silhouettes, and as the child correctly names or describes the objects, their detailed images or names are revealed. This approach encourages the child to actively engage with the material and reinforces the associative connections between verbal and visual information.

Another benefit of interactive mnemo-infographics is the ability to incorporate multimedia elements, such as audio recordings or animations. For instance, when a child touches a certain element of the mnemo-table, they can hear the corresponding word or phrase pronounced correctly, helping them to improve their diction and auditory perception.

Interactive mnemo-infographics can also be used for developing storytelling skills. A child can rearrange the elements of a mnemo-table to create their own story or retell a familiar plot, practicing their ability to construct coherent narratives and use descriptive language.

Overall, the use of interactive mnemo-infographics in speech therapy not only makes the learning process more engaging and motivating for children but also provides a multisensory approach that facilitates the development of various speech and cognitive skills.

The integration of infographics and mnemonics, particularly interactive mnemo-infographics, into speech therapy practice has proven to be highly effective in engaging children and facilitating the development of various speech and cognitive skills. By combining visual and verbal elements, interactive mnemo-infographics create vivid associative connections, promote better memorization, and encourage active participation in the learning process. As technology continues to evolve, speech therapists have access to an increasing array of tools and resources to create engaging and effective interactive mnemo-infographics, tailored to the specific needs of each child.

Scribing as a Promising Visualization Technique

One of the promising visual technologies that has significant potential in speech therapy work with children exhibiting severe speech disorders is scribing. Scribing is the process of visualizing the main content using signs and images, when the drawing of elements occurs in parallel with the narration.

Scribing (from the English «scribe» - to sketch or draw) is the process of visualizing the main content using signs and images, where the drawing of elements occurs simultaneously with the narration. This technique was invented by the British artist Andrew Park to popularize scientific knowledge. The teacher's speech is illustrated «on the fly» with drawings using a marker on a whiteboard or sheet of paper, creating a «parallel tracking effect» where we hear and see approximately the same thing.

This method attracts the attention of listeners, providing them with additional information, which also makes it possible to highlight the main points using drawings. Despite the simplicity of use, all the necessary requirements were taken into account when creating scribing:

- conceptuality (the presentation is created directly while listening to the text)
- systematicity (coherent, logically understandable, and interconnected transmission of information at each stage of the narrative)

- manageability (an interesting plot and certain logic are initially established by the speech therapist, with subsequent adjustment and consideration of the peculiarities of children's perception)
- reproducibility (after the presentation by the speech therapist, this technology can be applied by other teachers in working with children with disabilities).

At the preschool age, children learn to draw before they can write. Drawing helps them convey information, express emotions, and moods.

Scribing can be used in three main forms:

- scribing facilitation (reproducing images in real-time, used in teaching, at conferences, presentations, etc.)
- video scribing (using a pre-prepared video with scribing, voiceover, and musical accompaniment)
- 3D scribing (creating three-dimensional images using 3D pens in real-time, resulting in a physical object)

Depending on the tools, scribing is divided into traditional manual (drawings are created on any suitable surface with markers, pens, or chalk) and computer-based (images are created in a graphic editor on tablets, laptops, or PCs using a stylus or mouse). The scriber transforms complex information into simple symbols and familiar objects from everyday life, turning dry theory into a colorful and engaging story that is easy to recall. Thanks to visual thinking, children's mastery of the material will be more effective.

Unlike other ways of conveying information, the distinguishing feature of scribing when working with children is the ability to simultaneously engage the child's hearing, speech, vision, and imagination. Simple images are captured in the process of conveying information, so preschoolers not only better understand it but also remember it. By looking at the scribe drawings, the child will be able to recall the story they heard, at least in general terms. This technology is actively used for developing coherent speech in children with severe speech disorders.

In corrective and developmental work with such children, various types of scribing are used: application (ready-made images corresponding to the text are placed or glued onto an arbitrary background), magnetic (a variation of application, where images are attached with magnets to a presentation board), and flannel board (ready-made figures and images for storytelling are attached to a flannel-covered board). These types are appropriate for working with younger and middle preschool-aged children with severe speech disorders, while drawn scribing is more suitable for older preschoolers exhibiting higher levels of cognitive development and fine motor skills.

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The application and magnetic scribing techniques involve using pre-made visual aids like pictures, icons, or symbols that directly represent elements of the story or learning concept. The speech therapist can arrange these visuals on a board or background in a structured sequence as they narrate the story. Children then associate the unfolding narrative with the corresponding images. This form of scribing is especially beneficial for younger preschoolers or those with more limited attention spans, as the ready-made visuals provide clear concrete representations without requiring drawing ability.

With the flannel board approach, fabric cutout characters, objects, and scenery components can be arranged on the textured flannel surface to recreate the story scenes. The fuzzy flannel allows the pieces to cling temporarily, enabling the speech therapist to manipulate and rearrange them dynamically as the narrative progresses. This interactive, tactile nature makes flannel board scribing highly engaging for young children while supporting their comprehension through vivid visual depictions.

For older preschool children with more advanced cognitive capabilities, drawn scribing presents an excellent technique to truly captivate their imagination and reasoning skills. In this approach, the speech therapist or student actively draws illustrations, diagrams, or symbols on a whiteboard, paper canvas, or digital platform in real-time synchronization with the narrated story content.

The drawing process itself becomes a performance art that transfixes the child audience, as they witness abstract ideas and narratives taking vivid visual form before their eyes through the scribing illustrations. Since the child co-creates the visualization by providing input and prompting specific drawings, they develop a profound sense of investment, ownership, and connection to the story.

Moreover, the complexities of drawn visuals cater to the more sophisticated information processing abilities of older preschoolers. Nuanced symbols, embedded metaphors, and multi-layered scenes challenge their analytical thinking as they discern meaning from the chalk strokes and marker trails. Their storytelling and narrative skills get a robust exercise through describing the drawings, interpreting implicit messages, and verbally reconstructing the tale.

The act of drawn scribing also yields auxiliary developmental benefits beyond speech and language domains. Actively observing the illustration process stimulates visuospatial faculties, while creating their own drawings promotes eye-hand coordination and refines motor skills. Additionally, waiting for the scribed visuals to materialize inch-by-inch fosters patience and focused attention.

Children's involvement in the drawn scribing process can progress from simply suggesting objects to draw, to describing scenarios for the scribe to depict, all the way to independently illustrating portions of the story themselves with guidance. This scaffolded creative authorship nurtures their communication abilities, self-expression, self-confidence, and developmental aptitudes in a harmonic synergy.

While all forms of scribing leverage visualization as a pivotal learning anchor, the drawn approach places maximal emphasis on harnessing the creative energies of both teacher and students. The artistic co-creation becomes an intimate collaborative exploration where imparting knowledge and skills amalgamates with higher-order cultivation of imagination, cognition, and communication competencies.

No matter which scribing modality is employed, the core ethos remains consistent - transforming the abstract and ephemeral into vibrant, tangible narratives. Scribing harnesses the universal human affinity for storytelling and our intrinsic propensity to depict concepts visually. By intertwining words with spontaneously manifested illustrations, scribing forges multi-sensory associations that solidify learning impressions.

The unique dynamism of scribed visuals, quite literally sketched into existence in lockstep with the auditory narrative stream, energizes children's rapt engagement while fusing semantic and symbolic comprehension pathways. Traditional static imagery is powerful, but scribing's kinetic portrayal of evolving scenes catalyzes an unparalleled sense of immersion, participation, and resonance within the child's consciousness.

In the speech therapy context of cultivating communicative faculties for children with severe language disorders, the multidimensional nature of scribing facilitates holistic development across intersecting domains. Vocabulary enrichment amalgamates with conceptual reasoning. Linguistic constructions interweave with visuospatial processing. The very neural networking pathways that form the bedrock of communication skills get reinforced from multiple planes of perception and cognition simultaneously.

Ultimately, the profound impacts of incorporating scribing into speech therapy stem from its inherent qualities as an experiential, multimedia pedagogy that awakens the curiosity, creativity, and drive for self-expression embedded in every child's psychology. Scribing eschews the passivity and compartmentalization of conventional instruction, instead dynamically co-opting the learners into an

immersive journey of storytelling, knowledge construction, and capacity-building facilitated by the synergistic dance of words and visuals.

When a child perceives the very thoughts and narratives being conveyed also vividly emerging as illustrations crafted by their own imagination and voice, a transformative resonance takes root. They intuit that comprehension is an act of co-creation, and that the language abilities nurtured through scribing are gateways into bringing the theater of their minds into existence - one scribed visualization at a time.

Drawn scribing is a classic variant, where the artist (scriber) directly depicts pictures, diagrams, and images. In speech therapy practice with older preschool children, the use of drawn scribing allows the speech therapist to engage all of the child's higher mental processes. Drawing images helps not only to express emotions on paper but also awakens the imagination, develops fine motor skills, spatial orientation, activates visual-figurative thinking, and facilitates memorization of information. Attention should be paid to both the drawing and the text of the narrative - story, fairy tale, or short story. Drawings can be made with anything: markers, pencils, using paper or a presentation board.

Drawn scribing is best done within the studied lexical topic. The teacher should clearly select the lexical material in accordance with corrective, developmental, and educational objectives. During a speech therapy session, at the stage of automating problematic sounds, a fairy tale can be invented, for example, about a disobedient sound that went for a walk and got lost. A problem situation is created for children, where only the child can help the main character by performing certain tasks. Throughout the session, the child makes sketches in parallel with the spoken text, which is classic scribing. At each stage of the session, the child first makes sketches with the help of an adult, and then independently, highlighting the main events. Each image is accompanied by an explanation from the child about what or whom they have depicted and what is happening in their drawing. After completing the story, the child retells what they have heard, relying on their drawings. This method can be used in both individual and group sessions. For group sessions, the teacher can prepare a supporting scheme within the lexical topic, based on which the students will compose and reproduce the story.

When using scribing technology in working with children with severe speech disorders, the following main stages should be highlighted:

- formulate the theme (idea), which should be understandable to the children's audience;
- choose visualization methods and develop a script, detailing what will be discussed and using which images to convey the meaning for children of a certain age;

- think through the sketch drawings, the number and speed of demonstration of which should coincide with the time for voicing;
 - direct implementation of scribing.

The most important points when using scribing with children with severe speech disorders are the need to consider their age characteristics, as well as their intellectual, emotional, and physical developmental levels. During the creation of stories, a certain character or hero with special character traits that will be reflected in the presented events must be present. The main character must evoke sympathy. The story should evoke a sense of empathy for the presented characters in children. It is important to use open-ended questions to children that will engage them in participating in the narrated story. It should be understood that a simple presentation of facts is not enough - children perceive the world holistically, so it is necessary to add an emotional background to the facts. Moreover, it should not be forgotten that children's imagination and fantasy are more flexible than adults'.

Thus, the use of scribing in speech therapy work with preschool children significantly increases the effectiveness of the memorization process, increases its volume, enriches vocabulary, develops coherent speech, and fosters children's creative imagination. Children develop a desire to retell - the child understands that this is not difficult at all. The process of learning poems turns into a game that children really enjoy.

Conclusion

Visualization with digital technologies plays a pivotal role in increasing the effectiveness of speech therapy work with children exhibiting severe speech disorders. The use of specialized programs and applications with visual elements such as pictograms, animations, and interactive exercises helps facilitate information perception, develop communication skills, and better assimilate speech material for this category of children.

Among the most common methods of digital visualization in speech therapy practice, infographics and scribing should be highlighted. Infographics allows for presenting information in the form of vivid images, diagrams, and animations, attracting children's attention, contributing to better memorization of material, and motivating learning. Scribing visualizes content using drawings that are created in parallel with the narration, simultaneously engaging the child's hearing, vision, and imagination.

The use of interactive mnemo-infographics, which combines the advantages of mnemonics, infographics, and digital technologies, is also a powerful tool in speech therapy practice. It allows for presenting material in an engaging game form, activating children's attention, memory, and thinking.

The use of scribing facilitates the development of coherent speech, vocabulary enrichment, better memorization of information, and the development of creative imagination in children with severe speech disorders. Different types of scribing (drawn, application, magnetic, flannel board) can be used depending on the age and needs of children.

In general, the introduction of modern digital visualization technologies, such as infographics, scribing, interactive mnemo-materials, into speech therapy work with children exhibiting severe speech disorders makes the learning process more visual, engaging, effective, and contributes to better correction of speech disorders in this category of children.

Bibliography

- 1. Arendaruk, A. O. (2012). Lohopedychnyi suprovid ditei z TPM v umovakh intehratyvnoho navchannia, yak psykholoho-pedahohichna problema [Speech therapy support for children with TPM in the conditions of integrative learning as a psychological and pedagogical problem]. *Naukovyi chasopys NPU im. M. P. Drahomanova. Seriia 19, Korektsiina pedahohika ta spetsialna psykholohiia, 21, 3–6.* [in Ukrainian]
- 2. Khmil, N. A., Halytska-Didukh, T. V., Tsiantsi, V. (2023). [Vykorystannia virtualnoi ta dopovnenoi realnosti v ukrainskii osviti The use of virtual and augmented reality in Ukrainian education]. *Academic visions*, 22. URL: https://zenodo.org/records/8251886 [in Ukrainian].
- 3. Kurienkova, A. V. (2023). Innovatsiini tekhnolohii movlennievoho rozvytku ditei z ZNM v roboti vchytelia-lohopeda [Innovative technologies of speech development of children with general speech underdevelopment in the work of a speech therapist]. *Humanities science current issues*, 2(62), 248–254. https://doi.org/10.24919/2308-4863/62-2-40 [in Ukrainian].
- 4. Kurienkova, A. V. (2023). Vykorystannia metodiv vizualizatsii v roboti z ditmy z tiazhkymy porushenniamy movlennia [Using visualization methods in work with children with severe speech disorders]. *Inclusion and Diversity*, 30–33. https://doi.org/10.32782/inclusion/2023.spec.6
- 5. Matkovska, T. (2020). Vykorystannia vizualni tekhnolohii skraibinh v roboti lohopeda [The use of visual technology scribing in the work of a speech therapist]. Zbirnyk naukovykh statei uchasnykiv Vseukrainskoi naukovo-praktychnoi Internet-konferentsii studentiv, mahistriv ta molodykh naukovtsiv «Suchasne doshkillia: aktualni problemy, dosvid, perspektyvy rozvytku» (23 zhovtnia 2020 roku). *Nizhyn: NDU im. M. Hoholia, 238-234.* [in Ukrainian]
- 6. Moroz, L., Stakhova, L., Kravchenko, I. (2019). Lohopedychnyi suprovid yak skladova kompleksnoho suprovodu ditei iz porushenniam psykhofizychnoho rozvytku [Speech therapy support as a component of comprehensive support for children with psychophysical developmental disorders]. *Pedahohichni nauky: teoriia, istoriia, innovatsiini tekhnolohii, 8 (92), S. 401-411.* [in Ukrainian]

- 7. Polievikova, O. B., Piatko, N. V. (2021). Skraibinh yak linhvodydaktychna innovatsiia [Scribing as a linguodidactic innovation]. The 8th International scientific and practical conference "Fundamental and applied research in the modern world" (March 17-19, 2021) BoScience Publisher, Boston, USA, S.792-796. [in Ukrainian]
- 8. Ribtsun, Yu. V. (2020). Uchni pochatkovykh klasiv iz tiazhkymy porushenniamy movlennia: navchannia ta rozvytok [imary school students with severe speech disorders: training and development]: navch.-metod. posib. Lviv: Svit. 264 p..[in Ukrainian]
- 9. Rohde, Michael D. (2013). *The Sketchnote Handbook: the illustrated guide to visual note taking*. Pechpit Press. 224 p.

THE USE OF COGNITIVE-EMOTIONAL TASKS

AND ENVIRONMENTAL GAMES IN THE FORMATION OF ENVIRONMENTALLY APPROPRIATE BEHAVIOR OF PRIMARY SCHOOL PUPILS

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Abstract. The article solves the problem of environmental education of primary school pupils. The purpose of the study is theoretical substantiation and development of cognitive-emotional tasks and environmental games in the formation of environmentally appropriate behavior of primary school pupils. To achieve the goal of the publication, a differentiated stage of formation of environmentally appropriate behavior is substantiated, which involves the simultaneous formation of the components of environmentally appropriate behavior based on the introduction of a complex of cognitive-emotional tasks and environmental games. A complex of cognitive-emotional tasks has been developed, which are aimed at: identifying the relationships between animals and plants and their habitat, adaptive features of living organisms, food chains in nature; understanding the universal value of all natural objects; analysis of life situations in order to form the moral position of junior schoolchildren; clarification, establishment of norms and rules of behavior in nature. It has been proved that the game of ecological content contributes to the realization of the child's behavioral potential in relation to nature, provides an understanding of one's own activities in nature.

Key words: environmental games, cognitive tasks, primary school pupils, environmentally appropriate behavior, ecological culture, educational technology, environmental education.

Introduction. The problem of the environment protection is extremely urgent and attracts more and more attention, because awareness of the importance of environmental problems, real and potential, is an essential part of a sustainable development and high quality of life of every person, society and nation as a whole. Currently, environmental problems are the result of the long-term disharmonious development of social and economic processes in individual countries and regions, as well as world civilization.

After the war, our country is forced not only to update the infrastructure and economy, but also to pay attention to the ecological aspect of development, taking into account the consequences of the conflict and the need for a sustainable future. Only fundamental changes in the system of values existing in society can save nature, and therefore humanity. It is about creation of a powerful system of educational influences aimed at harmonizing the thinking of modern man and forming in him the

correct emotional-value attitude towards nature. Special hopes are placed on the school. It is school that equips the individual with the basics of knowledge about the surrounding world, which is an important component of the environmental competence of the individual. Knowing nature is a necessary, but not sufficient, feature. The school should also take care of early fostering children's readiness for ecological activities, form the appropriate skills of environmentally appropriate behavior.

In Ukraine, there is an appropriate legal and regulatory framework for environmental education and training, in particular: the Constitution of Ukraine, the Law of Ukraine "On Education" (2017), the Law of Ukraine "On the Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the Period Until 2030" (2019). Various aspects of environmental education are disclosed in the "Concept of Environmental Education of Ukraine" (2001), where formation of an ecological culture of all layers of the population is declared to be one of the most important tasks. "Main orientations for teaching pupils of 1-11 grades of general secondary education institutions" (2011) include in the system of general cultural and civic values the careful attitude to nature, reveal its essence and specific age features, the topics of learning activities according to age. The state standard of primary general education (2018) among the key competences singles out environmental one that pupils of the new Ukrainian school should master. The concept of the "New Ukrainian School" (2016) emphasizes that upbringing should be an integral part of the entire educational process. Among the social-political values, the Concept of NUS also indicates formation of a respectful attitude towards the environment, an environmentally appropriate behavior. Fostering such behavior and environmental protection activities is impossible without junior schoolchildren's awareness of their own involvement in the problems of the environment and formation of responsibility for its preservation.

The purpose of this work is theoretical substantiation and development of cognitiveemotional tasks and environmental games in the formation of environmentally appropriate behavior of primary school pupils.

Research results. The term "environmental education" has appeared in pedagogical science relatively recently, but the problems of human-nature interaction were considered throughout the history of pedagogical science. The ideas of environmental education, which have gained special importance these days, were carved out as a result of the pedagogical achievements of several centuries.

Modern scientists point out the need for a radical restructuring of society's consciousness in the sphere of interaction with nature, formation of a fundamentally new – nature-centric worldview, oriented towards treating nature as a universal, social and personal value. After all, nature existed long before the appearance of man, and humanity appeared as its component and can exist only in

this capacity. Nevertheless, nature is intrinsically valuable because it is a complex dynamic system capable of long-term existence, self-regulation, and self-development, regardless of whether a person recognizes it or not. Solving this problem requires integration of natural-scientific and socio-humanitarian knowledge, therefore it is in the field of vision of both environmental science and philosophy, psychology, sociology and pedagogy.

Theoretical and methodological problems of education, especially environmental ones, are studied in the works of I. Bekh, H. Biiavskyi, A. Zakhlebnyi, I. Zvieriev, and I. Suravehina. Theoretical and methodological aspects of environmental education of schoolchildren, formation of a culture of ecological behavior, environmentalization of educational space, ecological competence, various aspects of behavior in the environment are revealed in the scientific works of V. Verbytskyi, O. Kolonkova, O. Prutsakova, H. Pustovit, N. Pustovit et al. Scientists have singled out different types of behavior in the environment, presented their characteristics. Ecological education of junior schoolchildren is the subject of study by V. Minaieva, H. Pustovit, L. Simonova, H. Tarasenko, I. Tsvetkova and other scientists.

The natural basis for the formation of environmentally appropriate behavior is age periods in which different relationships of the child with the natural and social environment are formed. Each age is important in its own way in the progressive movement of the formation of environmentally appropriate behavior as a process of assimilation of experience and a determined result of education. In primary school, the foundations of the worldview, elementary knowledge about nature, and ethical feelings are formed. Great importance in primary school is attached to the formation of children's knowledge about the relationship between man and nature, the education of a valuable attitude towards nature, concern for its preservation and reproduction, the ability to learn information about nature. After all, the junior school age occupies a special place in the education system, it is sensitive to socio-natural influences.

This is confirmed by the works of I. Bekh, L. Bozhovych, L. Vyhotskyi, V. Davydov, D. Elkonin, V. Mukhina, in which the main conditions and factors of primary school pupils' mental development and personality formation are determined. Research focuses on those characteristics of pupils that reflect the specifics of interaction with the surrounding world, including the natural and social environment. In general, primary school age is characterized by a restructuring of the components of intensity: although the cognitive component still dominates, its role decreases towards the end of the period, and the practical ones become more and more important.

The analysis of psychological and pedagogical studies on the problem of shaping the behavior of junior schoolchildren allowed us to qualify the environmentally appropriate behavior of primary school pupils as actions and deeds during direct and indirect interaction with nature, interconnected

by the goal of nature conservation, which are manifested in a non-pragmatic subject- subjective attitude towards objects of nature (Sbruieva, Kolyshkina, 2018).

On the basis of the essence and structure of environmentally appropriate behavior and taking into account the age characteristics of primary school pupils, the components and criteria for the formation of environmentally appropriate behavior are determined: cognitive (knowledge about behavior in nature); emotional-value (the desire to preserve natural objects); behavioral (ability and skills of environmentally appropriate behavior). In accordance with each criterion, the indicators and levels of the environmental behavior formation in primary school pupils are determined: environmentally appropriate, environmentally situational, pragmatic, environmentally inappropriate.

The results obtained during the ascertaining stage of the experiment testify to the insufficient level of formation of primary school pupils' environmental behavior, namely: only 10.8 % of pupils were found to have an environmentally appropriate level of environmental behavior formation. The behavior of such pupils is characterized by a systematic desire to preserve natural objects; they get pleasure from communicating with objects of nature; actively express positive emotions about nature.

31.0 % of primary school pupils are at the environmentally situational level. Such children know well the norms and rules of behavior, but do not always take responsibility for their observance in everyday life; they worry about the results of their own practical activities in nature, but they show initiative and independence under the condition of obtaining personal satisfaction; pupils willingly, but not systematically, together with parents and teachers participate in nature protection activities.

The largest number of pupils is at the pragmatic level (36.8 %), who do not know enough about the norms and rules of behavior in nature; they treat their duties situationally; have a small share of abilities and skills. Activities in nature are most often absent; feelings of responsibility are characterized by episodic nature and appear only under the direct control of adults; objects of nature do not evoke positive emotions in pupils.

21.4 % of primary school pupils are assigned to the ecologically inappropriate level. This level is characterized by a lack of ecological knowledge, a lack of ideas about the relationship between man and nature, and one's own involvement in nature conservation. Such children have wrong assessments and attitudes about nature; pupils do not show a desire to cooperate with parents and teachers.

The analysis of the teachers' work proved that attention is paid to the formation of environmentally appropriate behavior, but work in this direction is not always carried out systematically. Educators emphasized the expediency of wider implementation of playing, projective modern technologies of environmental education.

Thus, the results of the ascertaining stage of the experiment prove that there is an urgent need to substantiate the educational technology, which contributed to overcoming the existing

shortcomings, correcting the content, forms and methods of forming environmentally appropriate behavior of primary school pupils.

Educational technology is a scientifically based system of pedagogical tools, forms, methods, their phasing, aimed at solving a specific educational task (Pekhota, Kiktenko, Liubarska, 2002). The technology of formation of environmentally appropriate behavior of primary school pupils is based on the principles of environmental education and the principles of personality-centered educational technologies. Taking as a basis the essential understanding of technology as a means of structuring of the educational process, the differentiated stage of formation of environmentally appropriate behavior of primary school pupils is substantiated, which involves the simultaneous formation of the components of environmentally appropriate behavior based on the introduction of a complex of cognitive-emotional tasks and environmental games.

In order to justify the need to observe the norms and rules of behavior in nature, to analyze and correct the emotional-value attitude towards nature, interests and needs formed in schoolchildren, we turn to a complex of cognitive-emotional tasks. These tasks are aimed at formulating the rules of pupils' behavior in nature, identifying relationships in nature, contradictions in the interaction of humanity and nature (Tarasenko, 2008). In the course of solving cognitive-emotional tasks with the help of facts, figures, judgments, using the experience of observing behavior in nature, primary school pupils develop comprehension of personal involvement in solving environmental problems. Such tasks reveal the peculiarities of the pupils' attitude towards animals, plants, and people. By performing them, the child has the opportunity to understand the motives of his or someone else's act, the expediency of choosing one or another pattern of behavior, and to appropriately project his own behavior in nature. The complex of cognitive-emotional tasks is used at various stages of educational activities – during the explanation of new material, repetition and consolidation, as well as during excursions, observations, and in the practical activities of pupils in nature conservation. The complex consists of cognitive-emotional tasks aimed at:

- 1. Identifying the relationships between animals and plants and their habitat, adaptive features of living organisms, food chains in nature;
 - 2. Understanding the universal value of all natural objects;
 - 3. Analysis of life situations in order to form the moral position of junior schoolchildren;
 - 4. Clarification, establishment of norms and rules of behavior in nature.

The content of cognitive-emotional tasks is determined by the topics of the integrated course "I explore the world" and is united around the most important environmental problems. We will successively describe these types of tasks and consider their examples. While solving *the task of identifying the relationships between animals and plants and their habitat* on the example of various animals and plants, pupils find out how living organisms have adapted to their environment. Bright

and contrasting examples of adaptations of natural objects to living conditions are selected. This allows pupils to independently "discover" existing dependencies.

The task of identifying adaptive features of living organisms. This type of tasks involves identifying the main adaptive features of living organisms to environmental conditions: features of color, shape, etc. Pupils will learn that some animals (hares, squirrels) change their color so as not to stand out against the background of a snowy forest or summer nature, others have a protective color, thanks to which the animal is not visible in a pond (fish, frogs), among leaves (snakes), others acquire a bright color to scare away or, on the contrary, attract animals, for example, the bright fruits of berry bushes.

Tasks are offered on the topics: "Coloring of forest fruits", "Why does the ladybug not hide?" etc.

For example, the task "Why is this insect green?".

- Look at the picture, read the riddle, write a guess.

The spring jumps –

Green back -

From blade of grass to blade of grass,

From a branch to a blade of grass.

- Answer the question: why is the animal shown in the picture green? What is it connected with?
 - Name the animals with protective coloring according to the color of their habitat.

The task of identifying food chains in nature. This type of tasks reveals the ecological significance of each species of living organisms in nature, helps pupils avoid a one-sided, pragmatic view of the significance of natural inhabitants. Pupils find out that it is necessary to preserve every living organism because they are all connected by food chains. Special attention is paid to the importance of those animals (fly, mosquito, mouse) in the food chain that most people evaluate from the point of view of benefit or harm. For example, the task "Who feeds on mice?".

- Read the text, answer the question: "Usually, we rarely see these small gray animals. And there are a lot of them in nature in the forest, in the meadow, in the field. In years favorable for mice, their number increases tenfold. Of course, this is not joy for a person. But for wildlife, the year of the mouse means an increase in the number of predators that eat small rodents. Conversely, few mice mean hunger for predators".
- Who feeds on mice? Underline them: hare, wolf, crow, boar, woodpecker, elk, viper, bear, owl, beaver, cuckoo, mole, chipmunk. If all mice suddenly disappeared in nature, what would happen to other animals?

The next, second group of tasks is aimed at understanding the universal value of all natural objects. Tasks of this type have a generalizing nature and play a particularly important role in the formation of environmentally appropriate behavior and ecological culture of primary school pupils. The universal value of natural objects is realized, first of all, as belonging to the living ones; and life is inviolable in any form. As for the benefit and harm of natural inhabitants, these concepts are relative.

We offer the task "Wolf – forest sanitationist" (with elements of a role-playing game).

- Guess the riddle: who wanders the forest hungry in the cold winter?

A boy in the role of a Wolf: "Well, of course, it's me – an animal that looks like a sheepdog. People consider me an enemy of wild and domestic animals; they call me a forest or gray robber. And no one will think about how difficult it is to catch up with an agile and cunning hare, let alone talk about a deer or a roe deer – these strong recognized runners. That is why sick or weak animals come to me for dinner. That's why they call me the "sanitationist of the forest".

- In your opinion, is it possible to agree with such an opinion?

The use of game elements contributes to a better understanding of tasks. Through playing, pupils get to know the surrounding reality emotionally, learn to understand interdependencies in it, determine their attitude to things, people, and natural objects.

The third group of tasks involves the analysis of life situations with the aim of forming the moral position of primary school pupils. Analysis of life situations, facts from literature, construction of tasks on ethical topics contribute to the formation of pupils' moral position. An important role in this belongs to special tasks that reveal the essence of interaction with the natural environment, contribute to the formation of evaluative judgments of schoolchildren, the formulation of norms and rules of behavior in nature (how to feed wintering birds; how to collect mushrooms, berries, medicinal plants; how to observe the rules of personal hygiene, taking care of pets). We offer as an example the task "Telegrams from the forest".

- Imagine that the school received such a telegram from the forest:

"We are the first green, and for that, everyone criticizes us. We are even afraid to be the first to bloom in the forest. Help us! Your loyal friends: Willow, Cheremshyna, Forest Lilac".

- What answer will you send to this telegram? How can you help the trees in the forest?

The task of forming norms and rules of behavior in nature belongs to the fourth group. Reflecting on such tasks and discussing the answers, primary school pupils learn to evaluate facts environmentally competently and try to adhere to accepted norms of behavior in interaction with nature.

Tasks for the purpose of observations on excursions into nature allow competent assessment of facts and require pupils to observe environmentally appropriate norms of behavior. For example, tasks for an autumn field trip:

"Try not to make any noise. Watch the web very carefully. You will be able to see the owner of this web. Look at it. Name it. How many legs does it have? What is the importance of the web in the life of a spider? Consider the spider's diet. Draw a conclusion about the role of spiders in nature.

Collect leaves of various shapes and colors. Dry them at home. You will need the dried leaves at the handicraft lessons to make appliqués, panels, and bookmarks".

The use of a differentiated approach in the selection of cognitive-emotional tasks contributed to the fact that pupils actively performed the tasks that were possible for them, achieved positive results, and experienced pleasant moments of joy from performing interesting work. Along with cognitive-emotional tasks, environmental games were used to form environmentally appropriate actions and deeds of primary school pupils.

Taking into account that playing is the most important source of development of the arbitrariness of the child's behavior, it is a special form of modeling relationships between adults, fixed in the rules of certain roles. Having taken on the performance of one or another role, the child is guided by its rules, subordinates his behavior to the fulfillment of these rules (Shapar, 2007). The role-playing behavior in the game is complex. The game has a model that guides the child's behavior and serves as a standard for control; carrying out actions specified by the sample; comparison with the sample, i.e. control. The game contains all the main components of arbitrary behavior.

In order to expand and deepen knowledge about norms and rules of behavior in nature, correction of daily behavior of primary school pupils in relation to nature, formation of nature conservation motives of behavior, we use a complex of environmental games based on educational material offered by a typical educational program.

The complex consists of competitive, role-playing and simulation environmental games. Didactic games used in primary school can be role-playing games and games with rules (Savchenko, 2002). Role-playing is a type of game in which children take on the roles of adults and reproduce their actions in a game situation. The role of an adult contains hidden rules governing actions with objects, establishing relationships with other children in accordance with their roles. Games with rules are a type of group game in which the actions of participants and their relationships are regulated by rules that are binding on all participants.

Role-playing activities in environmental games are mainly focused around norms of attitudes between man and nature, norms and rules of environmentally appropriate behavior. In the game, the child seems to enter the sphere of human relations with nature. Norms and rules that underlie these relationships become through the game a source of formation of environmentally appropriate behavior of primary school pupils.

The use of environmental games is aimed at:

- expansion and deepening of knowledge about norms and rules of behavior in nature,
 establishment and study of relationships in nature;
 - formation of environmental protection motives for behavior, environmental protection skills;
 - correction of everyday behavior of pupils in relation to nature.

The complex consists of competitive, role-playing and simulation environmental games. Competitive environmental games are based on stimulating the activity of participants to acquire and apply environmental knowledge, skills, and abilities. Our research uses: games with questions, riddles, pictures, crosswords; environmental quizzes; marathon games.

Games with questions and tasks ("What? Where? When?", "Ecological labyrinth", "Visit to nature", "Flower patch"), riddles ("In the world of plants", "Which tree has such leaves?", "Flower mosaic", "Mysterious kaleidoscope") rely on the erudition of junior schoolchildren. For example, a significant part of the riddles described in the literature has an ecological orientation (A thin stem near the path, at the end of it – earrings. On the ground there are leaves – small flaps. It, like a good friend, heals wounds on our legs and hands. *Plantain*). They reflected knowledge about nature and man, accumulated over centuries and millennia. Therefore, games with riddles introduce schoolchildren to the diversity of the surrounding world, its patterns and connections, teach them to think and make decisions (Pustovit, Kolonkova, Prutsakova, 2014).

Primary school pupils like solving crosswords that are available for their age. They are especially interested in the following versions of crossword puzzles: with pictures of animals and plants marked with numbers ("In the Kingdom of Mushrooms"), with solving riddles marked with numbers ("Bouquet of Flowers"), with tasks in which pictorial, verbal descriptions of plants and animals are given ("Forest gifts").

Quiz games have a positive emotional impact on pupils: "In the water and near the water", "Smart people", "Funny Zoo-circus", etc. Ecological quizzes actualize the search for cause-and-effect relationships, ecological relationships, rely on children's logical thinking. For example, the purpose of the ecological quiz "What grows in the forest? Who lives in the forest?" there is deepening and generalization of pupils' knowledge about plants, mushrooms, animals of the immediate environment, about their habitats, rules of behavior of schoolchildren in the forest.

Quiz games are easy to give role-playing character. For example, the quiz "Forest is our common home" is conducted with riddles and guesses about natural objects – plants, mushrooms, animals, some rules for collecting plants, behavior with animals in the forest. Each student chooses the role of one or another natural object, chooses a riddle and paraphrases it on his behalf. Some

attributes of the game are also used to enhance the game effect: game symbols – hats, stickers, emblems.

Environmental games-marathons "Earth is our home", "Let's meet again" are held in such a way that the participants follow a route consisting of stages-stations "Forest", "Zoo", etc. At each station, children complete tasks, answer questions, and receive tokens. The team which has more tokens wins.

The use of these games with questions, riddles, pictures, crosswords, environmental quizzes, marathon games justify themselves at all stages of the lesson, on excursions, and in extracurricular activities.

Environmental role-playing games are based on modeling the social content of environmental activities: appropriate roles, system of relationships. In role-playing games, the conditions of an imaginary situation are created, and the participants play predetermined roles. Such games bring participants closer to real life conditions. In the research, we use plot-role-playing games, improvisational games.

Primary school pupils satisfy their aspirations and needs for communication with nature in the following plot-role-playing games: "Journey to the world of insects", "The tale of the forest", "Forest secrets", "Visiting the inhabitants of the underwater kingdom", "Bunnies and the fox", "Good purchases – forever!", "Secrets of the forest path".

Improvisational games ("Colorful River", "Zberihalochka"), environmental fairy tales ("Water-fairy", "Ripka", "Journey to the Forest Country") strengthen the poetic perception of nature, contribute to its cognition, develop children's interest, creative abilities, practical abilities and skills in the natural environment, environmentally appropriate behavior. The game-improvisation "One day in the life of little travelers" imperceptibly involves children in nature, develops interest in natural objects, practical nature conservation skills and abilities, environmentally appropriate actions and deeds. An improvised game arouses interest in the life of natural inhabitants, which has a positive effect on the process of cognition, on the formation of environmentally appropriate behavior, ecological culture. Improvisational games are used during lessons, excursions, trips.

Simulation environmental games are a type of environmental games based on modeling environmental reality and the content of environmental activities (Hroshovenko, 2018). In the research, we use the simulation games "Adventures on the road", table-top environmental lotto "Well, guess!", "Connoisseurs of nature". Thus, the environmental game "Adventures on the road" establishes the rules of behavior in nature; table ecological lotto "Well, guess!", "Connoisseurs of nature" help to understand ecological regularities, contribute to assimilation of knowledge about natural objects listed in the Red Book.

According to the duration the environmental games are divided into short-term and long-term (Borzyk, Shepel, 2019). Short ones occupy only part of the lesson ("Connoisseurs of nature", "In harmony with nature", "Flower mosaic", "Planet of mysteries", "Smart people", "Funny Zoo-circus", "What grows in the forest? Who lives in the forest?", "Adventures on the road"), long-term ones can be conducted during one lesson ("One day in the life of little travelers", "Let's protect the Earth!", "Planet, we are here!"). Most of the games used in the research belong to short-term games, since they are the ones that arouse the greatest interest in pupils, activate their abilities, arouse emotions, and do not bore them. Environmental games are held both during the lesson and on walks and excursions.

Let's give an example of the role-playing game "City of the Future".

The aim of the game: pupils have to develop a model of an environmentally clean city of the future.

The task of the game: to study and propose ways of rational use of natural resources, reducing the number of pollutants in the city.

Rules of the game. Pupils choose the roles of employees of the design office of the future – developers of projects for residential buildings, factories, and power plants. Schoolchildren should offer new opportunities for the rational use of natural resources: to place factories, residential buildings, and power plants in such a way as to reduce the impact of pollution on the environment.

Game start. Under the guidance of a teacher, pupils receive general information about the use of energy by humans, sewage treatment plants, the role of green spaces in maintaining clean air.

Game actions.

- 1 stage. At this stage, five levels of schoolchildren's work on the problem can be distinguished:
- Formulation of the problem. Examples of tasks: What is this problem? What do we know about this problem?
- Formulation of tasks to solve the problem. Examples of tasks: What can we do to...? What's the best...?
- Making a decision. Examples of tasks: What do we need to know in order to...? Where do we need to start...?
 - Implementation. Drawing up an action plan, development model, its description.
- Evaluation of the decision by pupils. Evaluation of the developed model by the children's design office.
 - 2 stage. Problem solving.
 - 3 stage. Making a model of an environmentally clean city of the future.

4 stage. Children's presentation of a model of an environmentally clean city of the future in the form of a drawing.

Summing up. The teacher evaluates pupils' work, identifies the children who have shown the best results.

Therefore, application of the developed complex of cognitive-emotional tasks and ecological games contributed to the formation of pupils' knowledge about the norms and rules of behavior in the environment, connections and dependencies in nature, emotional-value attitudes towards nature, which is an important regulator of the actions and deeds of pupils in nature.

Conclusion. The conducted research and theoretical-methodological analysis of the literature on environmental education proved that the normative regulation of the harmonious interaction of schoolchildren with nature is ecological culture of the nature-centric type, which is manifested in the environmentally appropriate nature of the actions of pupils in nature. The main indicator of the ecological culture formation of primary school pupils is environmentally appropriate behavior.

The process of forming pupils' environmentally appropriate behavior will be effective if a complex of cognitive-emotional tasks and environmental games are introduced into the integrated course "I explore the world" and into extracurricular activities. This will affect the emotional and need-motivational sphere of the pupil's personality. The presented cognitive-emotional tasks and ecological games allow analyzing and correcting the formed ecological value orientations, interests and needs; foster a personal attitude to environmental problems. Introduction of a complex of cognitive-emotional tasks and environmental games will contribute to the formation of knowledge about the norms and rules of behavior in nature, connections and dependencies in nature, emotional-value attitude towards nature, which is an important regulator of pupils' actions and deeds in nature.

The conducted research does not cover all the aspects of solving the problem under study. Prospects for further research are seen in highlighting continuity in the formation of environmentally appropriate behavior of preschool children and children of primary school age.

REFERENCES

Borzyk, O., Shepel, I. (2019). Ways of raising ecological culture in the educational process of primary school. *Pedagogy of creative personality formation in higher and secondary schools, 63, Vol. 1,* 105–109. Retrieved from: http://pedagogy-journal.kpu.zp.ua/archive/2019/63/part_1/23.pdf.

Hroshovenko, O. P. (2018). The formation of the ecohumanist position of a junior high school student in the conditions of schooling. *Young Scientist*, *1* (53), 283–288. Retrieved from: https://molodyivchenyi.ua/index.php/journal/article/view/5292.

Pekhota, O., Kiktenko, A., Liubarska, O. (2002). Educational technologies: teaching manual. Kyiv: A.S.K.

Pustovit, N. A., Kolonkova, O. O., Prutsakova, O. L. (2014). Formation of environmentally appropriate behavior of schoolchildren: manual. Kirovohrad: Imex-LTD. Retrieved from: https://lib.iitta.gov.ua/7370/1/2449 Pystovit.pdf.

Savchenko, O. Ya. (2002). Primary school didactics: a textbook. Kyiv: Genesis. Retrieved from: http://194.44.152.155/elib/local/sk/sk644883.pdf.

Sbruieva, A., Kolyshkina, A. (2018). Program-methodological support of school and family interaction in the formation of the pupils of primary school environmentally expedient behavior. *Pedagogical sciences: theory, history, innovative technologies, 3 (77),* 240–255. Retrieved from: https://library.sspu.edu.ua/wp-content/uploads/2018/09/Pedagogichni-nauki-3_2018.pdf#page=240.

Shapar, V. B. (2007). Psychological explanatory dictionary. Kharkiv: Flag. Retrieved from: https://archive.org/details/psyxoloh2007.

Tarasenko, H. S. (2008). We teach to know nature. Extracurricular educational work with junior pupils: manual. Kharkiv: Osnova. Retrieved from: https://drive.google.com/file/d/1eLL-xKeKV3WdNINcBx-rmy-WI-QDtVxM/view.

The Law of Ukraine "On Education" (2017). № 2145-VIII, 05.09.2017 p. Retrieved from: https://zakon.rada.gov.ua/laws/show.

The Law of Ukraine "On the Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the Period Until 2030" (2019). Retrieved from: https://zakon.rada.gov.ua/laws/show/2697-19#Text.

The concept of the New Ukrainian School (2016). Retrieved from: http://mon.gov.ua/activity/education/zagalna-serednya/ua-sch-2016/konczepcziya.html.

The concept of environmental education of Ukraine (2016). Retrieved from: https://zakon.rada.gov.ua/rada/show/v6-19290-01#Text.

FORMATION OF PRIMARY SCHOOL PUPILS' HEALTHY LIFESTYLE BY MEANS OF HEALTH CARE TECHNOLOGIES

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The main prerequisite for the social and economic development of our country is its population's health. Education of the younger generation in a responsible attitude to health, as the greatest value, becomes one of the country's primary tasks. In the modern process of reforming Ukrainian education system, creating new school, formation of a healthy lifestyle, strengthening health-improving education and fostering the younger generation's culture of health is of great importance. Leading a healthy way of life involves further development of national traditions and their interdependence with the humanistic and democratic achievements of the world community. Therefore, the leading government documents: the Constitution of Ukraine (Article 3), "Basics of Ukrainian legislation on health care", "National doctrine of education development in the 21st century", State national programs "Children of Ukraine", targeted comprehensive program "Physical education – nation's health" define tasks aimed at strengthening health of children and youth, forming a socially active, physically healthy and spiritually rich personality.

The foundations of a person's psychophysical and social health are laid even in preschool age, and the school period can be considered crucial for the upbringing of a healthy, physically resilient person and formation of his health. The new Ukrainian school recommends wide implementation of the technological approach, and this is an objective progress in the development of modern education, which will change the directions and approaches to ensuring natural development of the child. The most effective way to protect junior schoolchildren's health is a preventive approach, which is based on the implementation of health care technologies in the educational process of primary school, they will form a healthy lifestyle of primary school pupils. The relevance of the study of forming primary school pupils' healthy lifestyle is due to the need to use health care technologies, which involves a systematic set of measures aimed at the awareness of a healthy lifestyle by primary school pupils as one of the main social values.

Pedagogy borrowed the term "technology" from production, where it is defined as a combination of certain parts (elements, techniques, operations, actions, processes) and their sequence. The technology appears as an algorithm that helps achieve the planned result. At the end of the 20th century, pedagogical technologies were actively developing in Ukraine. However, even today, scientists do not offer common opinions regarding the concept of "pedagogical technology". The

analysis of the source base of research revealed more than 300 interpretations of the mentioned concept, depending on the author's idea of the structure and complexity of the educational technological process. All the same, they are united by the fact that they all have unity in defining the purpose of pedagogical technology, which they see in increasing the efficiency of the educational process and assure that schoolchildren will achieve the expected learning outcomes (Vashchenko, Svyridenko, 2006).

The main task of pedagogical technology is that it must meet the main standards of technology: reproducibility, systematicity, manageability, conceptuality, efficiency. However, it should be understood that changes in education, which are designed to develop modern society, can be achieved only under certain conditions of organizing the educational process, which will not harm the health of pupils and will be aimed at preserving, strengthening health and forming a healthy lifestyle in all participants of the educational process. And this requires the teacher to use specific (health-improving) approaches in the educational process (Semenova, Levchuk, 2007). The result of health education technology is formation of a healthy lifestyle through the use of organizational and methodological tools of the pedagogical process (Vasiichuk, 2008; Vashchenko, 2007).

Recently, in the systematization of educational technologies (administrative functions, organization of educational activities, educational work, etc.), a peculiar group has separated – health care technologies. It is worth noting that health pedagogy cannot be considered as a separate educational technology. At the same time, the content of the term "health care technologies" integrates several areas of work of an education institution to preserve, strengthen and restore the health of pupils.

Health care technologies in modern pedagogical theory and practice are understood as: optimal conditions for schoolchildren's stay in an education institution (without stressful circumstances, normalization of requirements, appropriate teaching and upbringing methods); a specially organized educational process (according to the child's age and individual qualities and sanitary and hygienic rules); sufficient in qualitative and quantitative sense of the motor mode. In the classification of existing health care technologies, the following technologies can be distinguished: health education, aimed at increasing children's level of knowledge, skills and abilities to counter threatening phenomena; formation of responsible behavior, sanitary and hygienic skills, development of life habits (restrain emotions, prevent conflicts and deviant cases, etc.); formation of safe behavior in pupils (I. Volkova). Therefore, the concept of "health care technologies" unites all the components of the education institution's activities related to the formation, preservation and strengthening of pupils' health.

The functioning of a general secondary education institution can be considered full-fledged and effective only under conditions of applying health care technologies professionally and creatively

in a single system. Among the health care technologies used in the pedagogical education system, we single out: organizational and pedagogical technologies that characterize the structure of the educational process, regulated by sanitary and hygienic norms, and contribute to the prevention of overfatigue, hypodynamia and other maladaptive states; psychological-pedagogical, related to the direct work of the teacher in class and psychological-pedagogical support of all elements of the educational process; educational technologies that include programs aimed at strengthening health and forming a culture of health among primary school pupils, raising motivation to lead a healthy lifestyle, prevention of bad habits, etc.

Taking into account the fact that health care educational technologies are designed to form special knowledge and practical skills for leading a healthy lifestyle in primary school pupils, we conducted an experimental study on the basis of Sumy primary school No. 30 "Unicum" in the city of Sumy during 2020-2023, which included ascertaining (revealing teachers' perception of the importance of using health care technologies in primary school during the educational process and identifying children's attitude to their use, the level of knowledge of junior schoolchildren about health preservation and a healthy lifestyle) and molding (implementation and evaluation of the effectiveness of using health care technologies in the educational process of primary school) stages of experimental research.

This study was conducted in three stages:

- 1. At the first stage, the psychological-pedagogical, methodological and educational literature on this issue was studied, the work experience of primary school teachers was investigated, and the purpose and tasks of the research were determined.
- 2. At the second stage, experimental research materials were developed (questionnaires, methods of using health care technologies), tests and observations were conducted.
- 3. At the third stage, the results of the molding experiment were analyzed, summarized and systematized.

In order to identify teachers' attitude to the use of health care technologies in primary school, a survey of primary school teachers was conducted. Among the 15 interviewed respondents who answered the questions of the developed questionnaire, the majority have a positive attitude to the use of health care technologies in the educational process. However, not everyone systematically and fully applies health technologies in their teaching because of a lack of time, lack of proper conditions, etc. But among primary school teachers there are those who use health care technologies systematically. They claim that pupils' interest in learning increases, as well as their work capacity and mental efficiency, and the child's health indicators improve.

The methodological guideline of the conducted work was the assumption that introduction of health care technologies into the educational process will provide an opportunity to improve the

quality of the educational process and maintain interest in the need to acquire healthy lifestyle skills. During the experimental study, considerable attention was paid to the organization of the educational process using health care technologies, their place in lessons, during breaks, and extracurricular work.

We divided the entire variety of research methods into three groups. The first group included methods and techniques based on statements and judgments: conversations, questionnaires, analysis of educational and methodological literature. The second group included methods and techniques based on observing the educational activities of pupils and the work of teachers. The third group included methods and techniques based on judgments about the pupils' activities of those people who directly communicate with them – these are questionnaires received from teachers.

The experimental study, which was conducted in second grades, was aimed at increasing the efficiency of the use of health care technologies that will contribute to the preservation of health among pupils.

Tasks of the experiment:

- justify the system of improving pupils' health, a complex of organizational forms and methods of activity aimed at preserving and improving the health of participants in the educational process;
- use health care technologies in the formation of a healthy lifestyle of junior schoolchildren and assimilation of educational material by pupils;
 - reveal the impact of health care technologies on the cognitive activity of junior schoolchildren. For this, 65 pupils were involved in the experiment, among them control group (2-A) - 32

last medical examination and counted the number of absences in both classes at the same time (Fig.

pupils and experimental group (2-B) - 35 pupils.

At the initial stage of research, we obtained data on the initial state of pupils' health in both classes. Before starting the research, we got acquainted with the pupils' medical cards, the data of the

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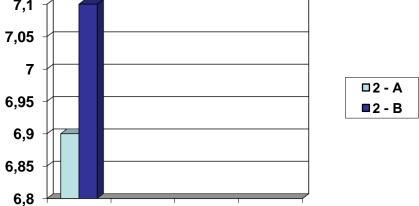


Fig. 1. School attendance by pupils

In our study, we identified criteria for evaluating the levels of formation of a healthy lifestyle by junior schoolchildren (Table 1).

Table 1

Criteria for evaluating the levels of formation of a healthy lifestyle in primary school pupils

Levels	Indexes
Optimal	There is a culture of leading a healthy lifestyle. Indicators are detected all the time. Indicators are manifested in actions and deeds, but not in full.
Admissible	Formation of a culture of a healthy lifestyle is unstable. Indicators are found sometimes.
Critical	Teacher control and intervention are required

Table 2 presents the levels of formation of a healthy lifestyle of junior schoolchildren.

Table 2

Distribution of pupils according to the levels of formation of a healthy lifestyle

(ascertaining stage of the experiment)

Group	Number of pupils	Levels of formation of a culture of a healthy lifestyle		
		Optimal Number / %	Admissible Number / %	Critical Number / %
Experimental	35	10(28,6%)	24(68,6%)	1(2,8%)
Control	32	11(34,4%)	19(59,4%)	2(6,2%)

In the control group, the educational process was carried out in a traditional way. In the experimental group, throughout training, health care technologies were intensively used in all areas of the educational process. We believe that the use of health care technologies should play an important role, contribute to the development of life skills, reduce the level of morbidity among junior schoolchildren, increase the level of pupils' awareness of healthy lifestyles, form and consolidate a style of behavior.

Based on scientific research and our own practical experience, we offer our own system of using health care technologies in the educational process of primary school, which is based on the following approaches to improving health:

- didactic (using the possibilities of the program material presented in textbooks, manuals, workbooks for understanding the concept of health and teaching the basics of its preservation and strengthening);

- step-by-step (developing practical skills of a healthy lifestyle and casually applying them in everyday life);
- problem-based (solving a specific task that will contribute to ensuring the health of schoolchildren, their parents and teachers, for example, organizing optimal motor activity, prevention of overfatigue);
- individual approach to each pupil, taking into account his physical and psychological characteristics;
- physical education (care for the health of schoolchildren includes fostering their physical development) (Bibik, Koval, 2005).

A child's health, his social and psychological adaptation and development are largely determined by the environment in which he lives. Taking into account the fact that for children such an environment is the school, where they spend a significant part of the time, we believe that its main task is:

- formation of pupils' knowledge about health and a healthy lifestyle, the relationship between the body and the natural, man-made and social environment;
 - teaching safe behavior;
 - ensuring a psychologically comfortable environment for pupils;
 - creation of favorable conditions for their development and self-development;
 - improvement of the functional state of the body;
 - increasing adaptation capabilities and forming motivation for a healthy lifestyle;
- formation of the need for health as an important life value (Bekh, 2005; Vasiichuk, 2008; Semenova, Levchuk, 2007).

One of the urgent tasks is to create a comfortable environment for the pupil in the classroom. For this, a favorable microclimate is created in the classroom: optimal lighting, temperature regime, regular ventilation, compliance with hygiene rules. Together with parents, they created "health paths" – wooden trays divided into three cells and successively filled with beans, chestnuts, expanded clay. Walking in socks on such a track helps to activate the reflex zones of the foot and strengthen the immune system.

Single desks provide an opportunity to simulate various positions during lessons, in particular organize group and pair work, etc. When placing children at desks, the following criteria were used: state of health (sight, hearing, back), height, psychological compatibility. Separate chairs and the space of the classroom make it possible to conduct training lessons, during which junior schoolchildren learn to cooperate in groups, see each other, communicate casually, move actively, following self-made rules.

In the phytotherapy corner, in the absence of contraindications, according to the relevant permission and recommendations of the doctor, in order to prevent various colds and viral diseases, pupils of the class drink delicious herbal teas. Periodically, preventive aromatherapy was carried out, using aromatic oils that have an antiviral effect, in particular, a mixture of pine, mint and lavender scents, which helps to almost completely restore the microflora of the room during the day. During rest, we offer children to pass a bag of herbs (mint, juniper) to each other. As a result, the incidence of acute respiratory and viral infections among schoolchildren has significantly decreased.

Developmental and game zones-centers were created in the classroom to ensure the leisure time of pupils, which foster development of their abilities and talents. In the center of cognitive and game activities, children had the opportunity to play checkers, solve puzzles, crosswords, read children's books and magazines, play role-playing games. The physical development center contained paraphernalia (jump ropes, balls, gymnastic sticks, skittles, etc.) that children used at physical education lessons and during breaks held in the school yard.

The school day begins with morning meetings, during which pupils exchange compliments, encourage each other, and mentally send kind words to their relatives and friends. Sincere feelings expressed during communication help schoolchildren to form a positive attitude to work. Point self-massage of biologically active areas of the body is performed in order to increase vitality and work capacity. The children skillfully massage the areas of the ears, nose, head, and eyes. The best way to start training is morning gymnastics. It can be a minute of physical education or breathing exercises, or a laughter therapy.

As for the health-improving organization of the lesson, a mandatory element to prevent pupils' fatigue is a minute of physical education, which has a positive effect on the analytical and synthetic activity of the brain, activates the cardiovascular and respiratory systems, improves blood circulation and efficiency of the nervous system. Various types of physical education minutes were used during experiment:

- exercises to relieve general or local fatigue;
- exercises that correct posture;
- respiratory gymnastics;
- exercises for hands;
- gymnastics for the eyes;
- gymnastics for training hearing.

In the process of writing, a pupil of elementary grades, as a rule, writes not with his hand, but with his "whole body". The child's muscles, which support posture and participate in writing, are in a state of prolonged tension. Therefore, exercises are recommended not only for the hands, but also for relieving general or local fatigue.

In order to improve the psychological climate in the classroom and create a friendly atmosphere, we widely use interactive forms and methods of learning. Most of all, pupils like such interactive methods as "Microphone", "Brainstorming", "Take a position", "Work in pairs", "Work in groups", "Two – four – together", "Circle of ideas", "Aquarium", "Press", "Unfinished sentences", "Associative bush". Pupils are equal partners in the lesson who learn to generate ideas, take care of their health and bodies, and strengthen their physical health.

At the molding stage of the experimental research, a number of non-standard lessons were conducted: trips, competitions, quizzes, fairy tales, trainings, projects, games, dialogues, press conferences, research, binary and integrated lessons, etc. We are convinced that conducting non-standard lessons contributes to the optimal assimilation of knowledge by junior schoolchildren about health and a healthy lifestyle. During the lessons, multimedia presentations were used, which, combining high-quality image, sound and dynamics, contributed to better assimilation of educational material and activated cognitive activity.

To reduce pupils' fatigue, two physical education breaks were held in each lesson: at the 15th and 30th minutes in grades 2-4 or at the 25th in the 1st grade. Remedial moments relieved tension from the organs of sight and hearing, from fingers tired from writing, normalized attention, restored strength, caused a feeling of vigor, improved mood, and increased work capacity. One of the methods to relieve hand fatigue while writing, develop fine motor skills, strengthen the muscular system, and relieve tension is finger gymnastics.

At reading and physical education lessons, breathing exercises were offered, which make a positive impact on the respiratory organs, improve their work, and develop imagination. Articulation and sound gymnastics strengthen speech apparatus, form the skills of correct pronunciation of sounds.

Color therapy (color strips, illustrations, landscapes) was used to improve children's health. To relieve visual fatigue, children looked at images where dominated green and blue colors, and pink to calm them down. Color therapy was combined with music therapy. When listening to musical works, junior schoolchildren developed abstract thinking; pupils were asked to choose cards by color to cover the listened fragment of music. The prerogative was given to classical works that relieve tension, stress, activate working capacity, or help to relax.

In the educational process, the music therapy technology "Pisneznaiko" was used, based on the therapeutic and health-improving features of music, which helps to actively implement creative abilities of primary school pupils, easy and free mastering of learning material, and strengthening of children's health.

In order to enhance activity and enthusiasm of junior schoolchildren, create a friendly psychological climate, and increase attention, energizing exercises were used. These short-term exercises provide an opportunity to reduce the fatigue of junior schoolchildren, increase interest in

learning, intensify cognitive abilities and potential, improve mood and get satisfaction from collective work. Fairytale therapy was also used in the educational process. Active participation of junior schoolchildren in health-preserving theatrical performances, performing fairy-tale actions during lessons or during group work determines their giftedness, provides children with health care knowledge, and forms universal human values.

Games that influence the child's individuality due to their significant didactic content are of great importance in the life of children of primary school age – these are special tasks, exercises to improve attention and memory, develop ideas, etc. Game methods, e.g. a method of psychotherapy for pupils, contributes to their versatile harmonious development, provides an opportunity in an exciting and immediate way to implement the necessary habits and skills needed in life, to form key and subject competences.

A positive mood is natural for children of primary school age, because joy and laughter ensure a happy state of the child, prevent stress and fatigue. Thus, the use of laughter therapy has a relaxing effect on children's stress, fear and anxiety. Moments of laughter during the lesson or during extracurricular activities accelerate the work of the cardiovascular muscles, saturate the child's body with oxygen, clean the upper respiratory tract, and improve immunity to diseases. Laughter exercises are combined with phonetics and fairy-tale therapy.

To create a healthy climate in the classroom, monitoring of the psychological state of pupils was used. For this purpose, we used a mood calendar. Children filled out this calendar on their own when they came to school. Information about the child's mood in the morning period was used to teach children to monitor the psychological state of friends and try to improve their mood, which contributes to the formation of a healthy team. Such information also served the teacher as a specific indicator for understanding the psychological state in the family and the education institution.

When studying the health education field, junior schoolchildren master the norms of safe behavior at home, in the street, in an education institution, in public places, children get acquainted with the rules of personal hygiene, hygiene of clothes and shoes, hygiene of the home, components of a healthy lifestyle. In the first grade, our journeys to the Land of Health began, and until the fourth grade, every lesson was a continuation of this journey.

Formation of healthy and safe lifestyle skills is also facilitated by arranging the classroom according to the health education field.

Medical data were processed and analyzed, which showed that in 2-A (control group) – the level of health indicators did not change significantly, and the results of work in 2-B (experimental group) confirmed the effectiveness of the proposed system (Table 3).

Distribution of pupils according to the levels of formation of a healthy lifestyle (molding stage of the experiment)

Group	Number of pupils	Levels of healthy lifestyle culture formation		
		Optimal	Admissible	Critical
		number / %	number / %	number / %
Experimental	35	20 (57,1%)	15 (42,9%)	0
Control	32	10 (28,6%)	24 (68,6%)	1 (2,8%)

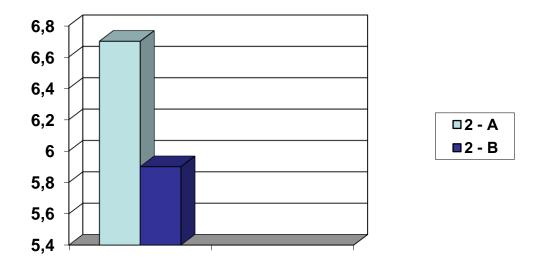


Fig. 2. School attendance by pupils

The results of the experimental study proved that there was an improvement in health indicators during the formation of a healthy lifestyle of primary school pupils by means of health care technologies. The dynamics of the levels of formation of a healthy lifestyle in the experimental group was significantly higher compared to the control group and was set at 57 % (experimental group) and 28.6% (control group), respectively.

Thus, the use of health care technologies in the educational process provided primary school pupils with the opportunity to maintain health through a healthy lifestyle during the period of schooling, equipped them with necessary knowledge and skills regarding a healthy lifestyle, and taught them to use the acquired knowledge in everyday life, which also contributed to the improvement of the quality level of pupils' mastery of learning material. The result of our health care activities is: improving the learning outcomes of junior schoolchildren; formation of the components of a healthy lifestyle; improving the physical component of the health of children of primary school age; increasing resistance of the children's body; balancing mental state of pupils when using health care technologies.

The obtained data of the experimental work allow us to assert that the planned and continuous introduction of a complex of health care technologies has a positive effect on the leading of a healthy

lifestyle by primary school pupils and on the education of a knowledgeable personality regarding health preservation and strengthening.

The conducted research does not cover all the aspects of the problem of improving primary school pupils' health. The following areas need further study and development: optimal forms and methods of individual and group work on the issue of health care for primary school pupils to make them aware of the value of a healthy lifestyle; creation of a health-preserving space in the work of the class teacher by introducing elective courses on preserving pupils' health.

REFERENCES

- 1. Bekh, I. (2005). Psychological reserves of personality education. *Native school*, 2, 11-13.
- 2. Bibik, N., Koval, N. (2005). "Basics of health" in primary school: methodological commentary. *Elementary School*, *10*, 42-47.
- 3. Vasiichuk, O.V. (2008). Socio-pedagogical aspects of forming a healthy lifestyle of younger schoolchildren. *Collection of scientific papers of ChNU (Pedagogical Sciences)*, 121, 42-47. URL: https://eprints.cdu.edu.ua/1107/
- 4. Vashchenko, O., Svyridenko, S. (2006). Teacher readiness to use health-preserving technologies. *Health and physical culture*, 8, 2-6.
- 5. Vashchenko, O. M. (2007). A healthy lifestyle is an important factor in personality development: theoretical and methodological aspect. *Teacher education*, *5*, 48-51.
- 6. Volkova, I. V. The concept of "health care technologies" and their classification. URL: http://edu-post-diploma.kharkov.ua
- 7. State standards of general secondary education. URL: https://mon.gov.ua/ua/osvita/zagalna-serednya-osvita/derzhavni-standarti
 - 8. Constitution of Ukraine. URL: https://zakon.rada.gov.ua
- 9. National doctrine of education development of Ukraine in the 21st century (2001). School world. Kyiv. URL: https://repository.ldufk.edu.ua/bitstream/34606048/3438/1/natsionalna%20doktryna.pdf
- 10. National program "Children of Ukraine". URL: https://zakon.rada.gov.ua/laws/show/63/96#Text
- 11. National program of education of children and student youth in Ukraine (2004). *The world of education, 4(5),* 7-23. URL: https://zakon.rada.gov.ua/rada/show/v6-98601-04#Text
- 12. Fundamentals of Ukrainian legislation on health care. URL: https://zakon.rada.gov.ua/laws/show/2801-12#Text
- 13. Semenova, N. O., Levchuk, M. V. (2007). Health promotion school design technology. *Educational work at school, 4,* 4-15.
- 14. Targeted comprehensive program "Physical education nation's health". URL: https://zakon.rada.gov.ua/laws/show/963%D0%B0/98#Text

PRESCHOOL CHILDREN UPBRINGING IN THE INFORMATION SOCIETY CONDITIONS

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Summary

There is a strong influence of information and communication technologies (ICT) at the present stage of society's development, which penetrate all spheres of human activity, ensure the spread of information flows in society and form a global information space.

The new reality is accompanied by changes in the educational process organisation, which must meet the modern capabilities of educational institutions. The problem of information technologies introducing is relevant, and its analysis in our study is timely.

One of the key results of the ICT introduction is the formation of a global information space. This space includes not only the Internet, but also all channels and means of communication through which people receive and transmit information. It is characterised by its immensity, dynamism and accessibility to billions of people around the world.

The development of society, science and technology makes it necessary for the preschool education system to use new teaching tools, because the preschool age of a child is the most favorable for the development of his or her creative potential and cognitive activity, and high-quality preschool education is the foundation of high-quality continuous education. Therefore, it is especially important that a child develops as a personality from the earliest years, actively studying and exploring the world around him or her.

The Basic Component of Preschool Education (2021) has introduced the educational direction "Child in Sensory and Cognitive Space. Computer Literacy", which involves the formation of preschoolers' digital competence.

The ICT impact on education has many aspects that require careful study and analysis. It is important to understand how ICT can be used to improve the educational process, as well as the challenges and opportunities they bring.

One of the most effective methods of increasing the cognitive activity of senior preschoolers is the use of correction tables. These tables, which can be presented both in printed and electronic form, contain various symbols, letters, numbers, pictures or words arranged in a certain order. When

children complete tasks with proofreading tables, they learn to focus on the task, find differences, memorise information and work independently.

It is important to note that the use of ICT in the preschool children education should be supervised by adults. It is necessary to dose the time spent on the computer, choose high-quality and safe resources, and teach children the rules of safe Internet use.

Attention is paid to working with parents and the importance of parental involvement in the educational process.

Key words: information and communication technologies, information society, information, senior preschool children, preschool education institution, cognitive activity, digital space, digital competence, educational process, proofreading tables, computer, gadgets, website of an educational institution.

Introduction

At the present stage of society's development, there is a strong influence of information and communication technologies (ICT), which penetrate all spheres of human activity, ensure the spread of information flows in society and form a global information space.

The new reality is accompanied by changes in the educational process organisation, which must meet the modern capabilities of educational institutions. The problem of information technologies introducing is relevant, and its analysis in our study is timely.

One of the key results of the ICT introduction is the formation of a global information space. This space includes not only the Internet, but also all channels and means of communication through which people receive and transmit information. It is characterised by its immensity, dynamism and accessibility to billions of people around the world.

A number of new concepts have emerged, for example, the "information society" is "a new historical phase of society development in which the production, use and consumption of information becomes the determining way of activity in all spheres of social life (economy, politics and culture). The peculiarity of this society type is the crucial role of information and communication technologies (ICT), production of information and knowledge" [9].

Thus, "information" becomes the main commodity and product available to all members of society in an information society. Priority is given not to the strict rules of certain social actions, but to information as the basis for finding independent creative solutions, initiatives, etc. The Law of Ukraine "On Information" defines the concept of "information" as any information and/or data that can be stored on material carriers or displayed electronically" [7].

Information is the most valuable global resource in the modern world.

In the information society, the activities of both individuals and groups increasingly depend on their awareness and ability to effectively use the available information. The scientists I. Teplytskyi and S. Semerikov noted that the concept of the information society was formulated in the late 60s and early 70s of the twentieth century. The author of the term is Y. Hayashi, a professor at the Tokyo Institute of Technology, as well as a number of organisations working for the Japanese government. In the reports of these organisations for 1969-1971, the information society is defined as a society in which the process of computerisation gives people access to reliable sources of information, relieves them of routine work, and provides a high level of production automation [11].

The development of society, science and technology makes it necessary for the preschool education system to use new teaching tools, because the preschool age of a child is the most favorable for the development of his or her creative potential and cognitive activity, and high-quality preschool education is the foundation of high-quality lifelong learning. Therefore, it is especially important that a child develops as a personality from the earliest years, actively studies and explores the world around him or her.

The main regulatory documents governing the introduction of information and communication technologies in the activities of preschool education institutions are the Law of Ukraine "On the Basic Principles of Information Society Development for 2007-2015" (№537-V of 09.01.07) and the Order of the Cabinet of Ministers of Ukraine "On Approval of the Concept of the State Target Programme for the Introduction of Information and Communication Technologies "One Hundred Percent" in the Educational Process of Educational Institutions for the Period up to 2015 of 27.08.2010 № 1722", the Decree of the President of Ukraine "On Measures to Ensure the Provision of Education in Ukraine" of 30.09.2010, № 296/2010, Order of the Ministry of Education and Science "Rules for the Use of Computer Programs in Educational Institutions" of 02.12.2004, № 903 (as amended by Order of the Ministry of Education and Science, Youth and Sports № 578 of 14.06.2011), Resolution of the Verkhovna Rada of Ukraine "On Recommendations of Parliamentary Hearings on the topic: "Legislative Support for the Development of Information Society in Ukraine" (Bulletin of the Verkhovna Rada, 2014, № 33, p. 1163) 03.07.2014, №1565-VII.

The authors of the "Concept of Children and Youth Education in the Digital Space" [5] note that a modern child discovers the world not only directly through knowledge of the surrounding reality or studying in an educational institution and family influence, but also indirectly through information and communication tools, in particular a smartphone. This situation determines the specifics of child upbringing and development, the need for changes in educational policy and established methodological practices not only at the level of the school as an educational system, but also in the family as the primary institution of upbringing [5].

The reasons for the modern preschooler immersion in the digital space as a consumer and a creator at the same time are the following [5, p. 7]:

- 1. Widespread curiosity, high level of cognitive activity.
- 2. The need for vivid external impressions.
- 3. The need for communication.
- 4. The need for play as a leading activity.

There are both some benefits of early preschoolers' immersion in the digital space (expanding the child's range of interests, opportunities to gain additional awareness, development of purposefulness, intelligence, etc.) and some risks of early preschoolers' immersion in the digital space including lifting of prohibitions and restrictions on moral, ethical and social plans; predominance of Internet plans enriched with advances in artificial intelligence and machine learning, technologies for creating virtual and augmented reality, deformation of visual and auditory perception, establishment of cause-and-effect relationships between phenomena; insufficient development of self-regulatory mechanisms, weak volitional and emotional control; circulatory disorders, stagnation in the child's body, diseases of the musculoskeletal system, gastrointestinal tract, etc. [5, p. 7-8]. As we can see, there are many more risks.

The need to use computer technology in the educational process is regulated by the regulatory framework. The Law of Ukraine "On Preschool Education", the Basic Component of Preschool Education (2021) define the requirements for obligatory competencies and educational outcomes for a preschool child (6 (7) years old), as well as the conditions under which they can be achieved in accordance with international standards of education quality [1]. Thus, the Basic Component of Preschool Education (2021) has introduced the educational direction "Child in Sensory and Cognitive Space. Computer Literacy", which involves the formation of preschoolers' digital competence [1]. "Digital competence is the ability to use information and communication and digital technologies to meet their own individual needs and solve educational and game tasks based on the acquired elementary knowledge, skills, and positive attitude to computer and digital technology" [1].

The Basic Component of Preschool Education (the State Standard of Preschool Education) (2021) provides for an emotional and value-based attitude as a result of mastering digital competence: a child's interest in computer and digital technology (phone, computer, tablet); a child wants to participate in the children's media environment; has a cognitive need to think during computer games; shows respect for other participants in the information space (users), a positive attitude towards modern digital technologies, etc. [1]. The knowledge includes the following: has an idea of ICT digital technologies as modern technical means that expand information horizons and help to navigate the world in a highly technicalised life; demonstrates awareness within the age limits of modern technical means of learning, ways to control them with peripheral devices; correctly names their parts; has skills of searching, transferring information, etc. [1].

According to K. Suyatinova, the modern educational process cannot be holistic and complete without the use of digital competence. In the process of rapid society development, digital competence is perhaps the most important component of the modern educational process. Despite a wide range of studies, the issue of forming digital competence and skills in preschool children is part of the general problem of competence development [10].

The conceptual provisions of the raising children in the information society problem have been developed in psychological and pedagogical research by scientists: I. Beha, A. Bohush, N. Havrysh, O. Dolynna, O. Zaporozhets, S. Ladyvir, T. Pirozhenko, O. Reipolska, O. Savchenko, O. Sukhomlynska, N. Yarysheva, etc.

The scientific works of V. Vilnos, O. Kononko, Y. Prykhodko, O. Proskura emphasise the special sensitivity of preschool children to the influences of the information society, various emotional and imaginative stimuli, their emotional reaction to indirect impressions.

The impact of ICT on education has many aspects that require careful study and analysis. It is important to understand how ICT can be used to improve the educational process, as well as the challenges and opportunities they bring.

The purpose of our study is to reveal the role and importance of ICT on preschool children and the means of increasing the cognitive activity of senior preschoolers.

The use of ICT contributes to the processes of the scientific, informational and cultural space openness of preschool educational institution.

The introduction of modern ICT technologies contributes to:

- improving the quality, accessibility and flexibility of the preschool child's educating process;
 - improving the efficiency of educational process management;
- forming of a common information culture of all participants in the educational process [7, p. 3-10].

The use of ICT has the following positive aspects:

- emotional
- educational
- psychological
- didactic;
- information and demonstration, etc.

However, the leading and decisive role in the use of ICT undoubtedly belongs to adults at any level of technologisation.

Principles of children and youth education in the digital space are the following:

- the principle of confidentiality and security;
- the principle of individualisation;
- principle of accessibility;
- principle of expediency;
- principle of development;
- principle of flexibility;
- principle of innovation;
- principle of integration [5].

1. Using proofreading tables in preschool education institution

An important condition in the cognitive activity of a preschool child is the awakening of a common information and game interest in the process of using any effective developmental tool -a book, a set of pictures or a story picture, multifunctional equipment, etc. I propose to include N. Havrysh's proofreading tables to such tools [2, p. 20].

The scientists K. Krutii and N. Havrysh suggest using proofreading tables for the development of speech, mathematical skills, ability to navigate in space, etc. in preschool children.

The name "proofreading table" comes from the name of tables for psychological tests filled with letters or numbers. When working with such a table, the subject crosses out the given symbols. Scientists used such tables back in the XIX century. Over time, they were adapted to work with children, the symbols were replaced by pictures [3, p. 101].

Working with such tables allows the preschooler to actively learn about the world: to establish connections between different events, phenomena, objects, to experiment, to model. It promotes the development of communicative speech, improves perception, attention, memory, provides interest in intellectual activity and forms the ability to think creatively, unconventionally, and independently replenish their knowledge.

Proofreading tables are an information and game board with a different number of cells (from 9 to 25) filled with subject pictures (numbers or letters; numbers and letters; symbols or signs, geometric shapes). The pictures are selected by subject matter. The thematic palette of proofreading tables can be quite wide [4].

The pictures must be substantive to ensure the quality and clarity of perception: auditory (an adult's task or question) and visual (finding and answering a question or solving a task in the table). The pictures should be large enough, realistic so that the child can easily recognise them, preferably of the same type (drawings, photographs, diagrams, etc.) to facilitate their perception by children and to meet aesthetic requirements. The younger the children, the more obvious the connections between

the items as a thematic grouping should be. Each cell of a proofreading table should be numbered and signed in a printed font – this greatly expands the developmental possibilities of using such tables.

Working with proofreading tables is a kind of information and intellectual game that enriches and saturates the educational developmental environment [3, p. 65].

The main tools in working with proofreading tables are intellectual and speech tasks, games and exercises that will constantly correct children's ideas about objects, make them feel connected to everything; will promote the development of children's thinking and speech, improve perception, attention, memory, form the foundations of a dialectical worldview in preschoolers, reveal their creative abilities, increase cognitive activity, interest in intellectual activity. For example, games with the use of correction tables to develop children's cognitive activity: "What goes with what", "Mysterious signs", "Find the house", "Compare by size", etc.

The proofreading tables can also be used in play activities, so children will develop competitive motives, motor reactions, perception, vocabulary, independence, initiative, etc.

Let's highlight the advantages of using the proofreading tables in preschool education institutions:

- cognitive processes development;
- self-control skills formation;
- fine motor skills development;
- dysgraphia prevention.

The proofreading tables can be used as an interactive game with the help of ICT. When using interactive correction tables, children will increase their motivation to learn; interactivity; visualisation; such tables will quickly provide feedback on the child's actions and help to establish cause and effect relationships.

2. The study of the state of senior preschool children's upbringing in the information society

We have conducted an experimental study on the basis of the Municipal Institution of Preschool Education of Combined Type of Kryvyi Rih City Council.

The aim is to establish the state of senior preschool children's upbringing in the conditions of the information society.

The tasks are:

- 1. To identify the initial levels of information culture (awareness) in senior preschoolers.
- 2. To analyse the level of information and communication technologies implementation in the educational process.
 - 3. To analyse the results obtained.

We have identified the levels of information culture (awareness) of senior preschoolers in order to calculate the results of the study and obtain quantitative indicators. They are high, sufficient, and average.

We have offered the children to do the following tasks (according to N. Belikova) to identify the levels of preschoolers' information culture (awareness):

1. The "Components of a computer" exercise.

The purpose is to reveal children's knowledge of the main computer components and their purpose, to teach them to navigate them, to develop attentiveness.

The content: children are asked to show and name the main parts that make up a computer: system unit, monitor, keyboard, mouse, indicate the main purpose of each of them.

2. The "Think and tell" exercise.

The purpose is to identify knowledge of safety precautions when working with a computer, to teach them to follow them, to develop caution.

The content: children are offered a set of subject cards illustrating the peculiarities of handling a computer while working with it, choose those that meet the safety requirements, explain and justify their choice.

3. The "Find the same object as on the sample" computer game.

The purpose is to reveal children's ability to work on a computer, to teach them to perform an elementary cognitive task, to develop perseverance.

The content: there is a sample object at the top of the screen, in a frame; there are three other similar objects below it, only one of which is similar to the sample. The child is asked to choose an object similar to the sample. If the object is chosen correctly, then when the mouse clicks on it, the two extra pictures disappear.

The data obtained from the ascertaining stage of the experiment are presented in percentage terms in Table 1.1.

Table 1.1. Levels of senior preschoolers' information culture (awareness) of the studied groups according to the results of the experiment ascertaining stage

Groups	Levels, %		
	High	Sufficient	Low
Experimental group	25,0%	45,0%	30,0%
Control group	30,0%	55,0%	15,0%

Comparing the results obtained, we see that in both the control and experimental groups the overall level of senior preschool children's information culture (awareness) is below the sufficient level.

In addition, since the educator is the main actor who is responsible for the effectiveness of the educating preschool children tasks implementation in the information society, we have conducted a survey of teachers of senior groups "The use of information and communication technologies in pedagogical activity".

The survey has shown that teachers experience certain difficulties in the process of ICT implementing.

The difficulties lie in the teachers' lack of the ICT application peculiarities awareness and insufficient skills in creating an information media environment.

At the stage of the formative experiment, an experimental research program has been developed and implemented based on the following work plan (Table 1.2).

 Nº
 Date
 Work content

 1
 Introductory talk "Computer is a friend, an assistant or a universal information machine"

 2
 The "Erudite" club on the basics of computer literacy

 3
 Didactic educational computer games: "Virtual Designer", "The Fourth Extra", "Emotions − Feelings"

 4
 Multimedia lesson-journey "Love and know your native land"

 5
 Film laboratory "Little directors"

Table 1.2. Work plan at the stage of the formative experiment

We took into account the sanitary rules and norms for the ICT use while planning and organising work with children. For example, the Instructional and Methodological Recommendations "On the Organisation of the Activities of Preschool Education Institutions in the 2020/2021 Academic Year" of 30.07.2020 № 1/9-411 states that the duration of continuous work in front of a computer monitor for children aged 5 should not exceed 10 minutes. The maximum frequency of work during the week for children aged 5 and 6 is 2 times. The days of the week when it is advisable to work with a computer are Tuesday, Thursday which are considered as optimal days; it is possible to use gadgets on Monday; it is not recommended on Friday. Recommended time of day for studying is the first half is optimal; the second half is acceptable [12].

These recommendations are still relevant for young Ukrainians according to the conditions of education since 2020 and to this day.

This approach has made it possible to maintain the well-being and preschoolers' working capacity, as well as to prevent the development of undesirable health conditions. In accordance with the planned activities and forms of work, we selected and prepared a full-fledged multifunctional media library.

A second study of the levels of the senior preschoolers' information culture (awareness) was conducted after the formative experiment.

Some significant changes have taken place in the experimental group. Thus, if at the ascertaining stage there were 45.0% of children, then at the control stage of the experiment 55.0% of children reached a sufficient level.

The number of children who were at a low level decreased significantly. While at the ascertaining stage of the experiment there were 30.0% of such children, at the control stage there were 15.0%.

The number of children with a high level increased: at the ascertaining stage of the experiment, there were 25.0% of such children, and at the control stage, 30.0% of children were recorded at a high level, which is 5.0% more compared to the ascertaining stage.

There were insignificant changes among the children of the control group. The high level was reached by 30.0% of children in the experimental group and 20.0% in the control group. A sufficient level was shown by 55.0% of senior preschoolers of the experimental group and 45.0% of the control group. The low level includes 15.0% of children of the experimental and 35.0% of the control groups.

The use of information and communication technologies in the process of educating senior preschoolers has contributed to easier and deeper comprehension and mastery of complex abstract concepts by children, rapid formation of general learning skills, increased efficiency of attention and memory, and activation of emotional influence.

Information and communication technologies have helped to reduce the time for both simple and choice reactions, contributed to the development of purposefulness and concentration in the performance of tasks assigned to children, and the development of elements of visual and imaginative, logical, and theoretical thinking.

Thus, the quantitative and qualitative analysis of the results obtained showed that through the systematic use of ICT in the process of implementing the experimental research program, the senior preschoolers of the experimental group quickly learned to plan and build a logical chain of specific events elements, developed the ability to predict their own actions, which indicates the formation of the senior preschoolers' personality in the conditions of the modern information society.

You should note that preschool education institutions in Ukraine have been actively integrating information technology into the educational process for the last years. The diversity and versatility of online technologies determine their successful use in the organisation of distance

learning for preschool children, as they are aimed specifically at the development of various mental functions of children, such as visual and auditory perception, attention, memory, verbal and logical thinking, etc. [6].

The researchers K. Suiatynova and I. Kryzhanovska point out that the computer contains an imaginative type of information that is close and understandable to children. Movements, sounds, cartoons – all this attracts children's attention and interest. Children receive an emotional and cognitive charge from this, which will make them want to learn and play at the same time. Senior preschoolers have developed involuntary attention, which reaches its peak when they are interested. As a result, children improve the speed of acquiring and processing the information they receive, and memorisation is more effective in this case. Also, such classes have a good effect not only on the intellectual development of the child, but also on improving their motor skills. It is noted that the more we make finger movements, whether simple or complex, the more parts of the brain are involved [6]. Creating educational resources is a problematic process for a preschool teacher, as it often requires knowledge of the programming. However, there are apps and services that can be mastered independently. Learning Apps is one of such resources.

3. Work with parents

The development of the modern information society requires new approaches to education and upbringing of children. Information and communication technologies have become an integral part of the educational process, facilitating the active exchange of information and involving children's families in cooperation.

Preschool institutions have the following tasks to use the ICT in their work with parents:

- 1. Parents' involving in the institution educational process.
- 2. Providing an opportunity to receive information about the child's development and upbringing by a convenient means of communication.
 - 3. Promoting the system of pedagogical knowledge through the use of the ICT.

The monitoring has been conducted among parents to solve these problems.

The aim is to determine which communication method the majority of parents prefer and which way is more convenient for them to receive information about the education and upbringing of preschoolers. As a result of this monitoring, 78% of parents have recognised websites, e-mail, social networks, etc. as more convenient way of communication.

Each institution of preschool education has had official websites in the Internet for more than 15 years, which allows parents to quickly receive information about:

- the institution history;

- pedagogical staff;
- the institution innovative activities
- material and technical base;
- the institution educational work;
- psychological support;
- educational work;
- consultation point (the page of questions and answers for parents, administration, teachers).

According to the survey, 55% of parents regularly visit the preschool website, following the news and leaving comments in the feedback.

Communication and cooperation have moved to computer and web technologies. The advantages of such communication are the speed of information delivery, its confidentiality and constant feedback from parents.

Preschool institutions are interested in involving parents in the process of the ICT integration. Establishing a partnership between teachers and parents has a significant impact on the successful integration process.

The following strategies are used to promote parent-child cooperation in the ICT education:

- 1. Conducting workshops for parents.
- 2. Organising exhibitions of children's ICT-enabled works.
- 3. Consultations with parents on digital educational resources for home use.

Moreover, the Standard of Preschool Education in each educational area, including the variable component "Child in Sensory and Cognitive Space. Computer Literacy", clearly defines parental involvement – the ways for parents to support the process of developing information and communication skills:

- appropriate and moderate use of a computer by parents as a modern means of activity for a child of senior preschool age;
- selection of game and educational programmes that are conducive to the child's learning,
 the ability to consciously choose a method of action aimed at solving a problem;
- child's familiarising with the possibilities of using digital technologies in everyday life and leisure;
- creating favorable conditions for the formation of digital competence; explaining to the child the rules of behavior at the computer, explaining the dangers and rules of behavior in the Internet
 [1].

We note that the Instructional and Methodological Recommendations "On the Organisation of the Activities of Preschool Education Institutions in the 2020/2021 Academic Year" of 30.07.2020

№ 1/9-411[12] also refers to interaction with families, the development of a partnership model with families by each educational institution, which must be based on the principles of mutual respect, mutual trust, mutual understanding, cooperation, awareness of one's own responsibility. The forms of work can be traditional or innovative. In addition, the effectiveness of active and interactive forms of interaction that meet the modern needs of parents and interest them is recognised [12].

Thus, most parents support the strategy of preschool institution and transfer the experience of the ICT using from the educational institution to home education.

Conclusions

Thus, we have considered the impact of information and communication technologies on preschool children; revealed the ICT role and importance on senior preschoolers; conducted a study of the state of senior preschool children's education in the information society; presented one of the means of increasing the cognitive activity of senior preschoolers – the use of the proofreading tables.

The modern world is rapidly developing under the influence of the ICT, and this trend does not bypass preschool education. The ICT has a significant impact on preschool children, forming their worldview, skills and abilities. The ICT become not just entertainment for the senior preschool children, but also a powerful tool for learning and development. They provide access to an unlimited amount of information, stimulate cognitive activity, develop logical thinking, imagination and creativity.

The studies show that the use of the ICT in the senior preschool children's education has a number of positive effects. These include:

- improvement of communication skills;
- development of independent information search skills;
- increasing motivation to learn;
- development of computer skills;
- preparation for school.

One of the most effective methods of increasing the cognitive activity of senior preschoolers is the use of the proofreading tables. These tables, which can be presented both in printed and electronic form, contain various symbols, letters, numbers, pictures or words arranged in a certain order. When children complete tasks with proofreading tables, they learn to focus on the task, find differences, memorise information and work independently.

It is important to note that the use of the ICT in the preschool children's should be supervised by adults. It is necessary to dose the time spent at the computer, choose high-quality and safe resources, and teach children the rules of safe Internet use.

Thus, the ICT have a significant potential for the development and learning of preschool children, in particular senior preschoolers. It is important to use this potential properly, so that the ICT become not only entertainment for children, but also a powerful tool for learning about the world.

Bibliography (References)

- 1. Pirozhenko, T.O., Bayer, O.M, Bezsonova, O.K., Brezhneva, O.G., Havrysh, N.V., Zagorodnya, L.P., Kosenchuk, O.G., Korneeva, O.L., ... Shevchuk, A.S. (2021) Bazovyi component doshkilnoi osvity [The basic component of preschool education] (№33) Ministry of Education and Science of Ukraine URL: https://mon.gov.ua/storage/app/media/rizne/2021/12.01/Pro_novu_redaktsiyu%20Bazovoho% 20komponenta%20doshkilnoyi%20osvity.pdf (accessed 20.05.2024) [in Ukrainian]
- 2. Volovyk, T.V. (2019) Korekturni tablytsi yak zasib formuvannia informatsiino-ihrovoi tvorchosti doshkilnykiv [Correction tables as a means of forming information and game creativity of preschoolers]. *Pedagogical horizons*. *1-2* (103-104), 20-21. <u>URL: https://choippo.edu.ua/rar/PO1219.pdf</u> (accessed 26.05.2024) [in Ukrainian]
- 3. Havrysh, N.V. (2013) Intehrovani zaniattia u dytiachomu sadku [Integrated classes in kindergarten]. Kyiv URL: https://elibrary.kubg.edu.ua/id/eprint/10273/1/N Gavrish integrovani zaniatia metodika proveden ia.pdf (accessed 25.05.2024) [in Ukrainian]
- 4. Havrysh, N.V. (2022) Kaleidoskop informatsiino-ihrovoi tvorchosti ditei. Metodychni rekomendatsii shchodo vykorystannia korekturnykh tablyts [Kaleidoscope of information and game creativity of children. Guidelines for the use of proofreading tables]. Kyiv: Slovo Publishing House [in Ukrainian]
- 5. Kremen, V. (2022) Kontseptsiia vykhovannia ditei ta molodi v tsyfrovomu prostori [The concept of educating children and youth in the digital space] *Herald of the National Academy of Educational Sciences of Ukraine*. 4(2), 1-30. URL: https://doi.org/10.37472/v.naes.2022.4206 (accessed 26.05.2024) [in Ukrainian]
- 6. Kryzhanovska, I.Yu., Suiatynova, K.Ye. (2022) Learning.apps suchasnyi instrument vykhovatelia doshkilnoho zakladu v umovakh dystantsiinoho navchannia [Learning.apps a modern tool for a preschool teacher in the conditions of distance learning]. *Modern digital technologies and innovative teaching methods: experience, trends, prospects*: 10-11, 122-125. URL: http://dspace.tnpu.edu.ua/handle/123456789/27569 (accessed 26.05.2024) [in Ukrainian]
- 7. Law of Ukraine "On information" of 02.10.1992, № 2657-XII: as of July 27, 2023. URL: https://zakon.rada.gov.ua/laws/show/2657-12#Text (accessed 26.05.2024) [in Ukrainian]

- 8. Proskura, O. (2013) Informatsiino-komunikatsiini tekhnolohii v doshkilnii osviti: perspektyvy i vyklyky suchasnosti [Information and communication technologies in preschool education: prospects and challenges of the present]. *Kindergarten. 10* (682), 3-10. [in Ukrainian]
- 9. Stepanenko, V.P. (2011) Information society. Encyclopaedia of Modern Ukraine. URL: https://esu.com.ua/article-12462 (accessed 26.05.2024) [in Ukrainian]
- 10. Suiatynova, K.Ye (2022) Formuvannia tsyfrovoi kompetentnosti ditei doshkilnoho viku [Formation of digital competence of preschool children]. *Innovative pedagogy*. 2(44), 148-151. URL: http://www.innovpedagogy.od.ua/archives/2022/44/part_2/30.pdf (accessed 25.05.2024) [in Ukrainian]
- 11. Teplytskyi, I.O, Semerikov, C.O. (2005) Information Society: Humanistic Aspect. Drahoman National Pedagogical University. URL: https://doi.org/10.31812/0564/803 (accessed 26.05.2024) [in Ukrainian]
- 12. Instructional and methodological recommendations "On the organisation of activities of preschool education institutions in the 2020/2021 academic year" of 30.07.2020, № 1/9-411. URL: https://osvita.ua/doc/files/news/753/75395/5f2402c174135147155911.pdf (accessed: 26.05.2024) [in Ukrainian]

MEDIA LITERACY AS A SUBJECT OF STUDY AND PROJECT-FORMING DEFINITION IN AN EDUCATIONAL SCIENTIFIC-PEDAGOGICAL PROJECT

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Abstract

Relying on a retrospective analysis of one's own pedagogical practice, the peculiarities of the organization of an educational-scientific pedagogical project were revealed, which combined the study of the educational discipline "Pedagogy", conducting student psychological-pedagogical research and educational propaedeutic practice of the future teacher. The structure of the joint school and university project is characterized: development of diagnostic methods of psychological and pedagogical research and methodical development of educational activities; pilot testing, expert assessment of diagnostic methods and methodical developments); conducting research during the period of educational practice in primary school; carrying out a system of educational and formative activities in elementary and basic schools; coverage of the obtained results (preparation for printing of articles, printing of collections of materials).

Keywords: pedagogical professional training, scientific research work of students, research competence of the future teacher, practical pedagogical training, educational pedagogical practice, educational and scientific pedagogical project, technology of formation of research competence of future teachers.

Introduction

The criterion characteristic of the pedagogical competence of the future specialist is the effectiveness of the acquired educational achievement in professional activity. In this study, the study of an educational discipline is considered as an educational project, the result of which is the development and implementation by students of the tasks of the educational week in primary school (diagnostic study of an educational problem and coverage of the obtained results in scientific student articles, methodical development and implementation of collective and mass forms of educational work, study pedagogical experience of the school's pedagogical team), which is the basis of the pedagogical competence of future teachers in the second year of study. Professional activity in this study became integral in the educational project, which combined theoretical knowledge of the discipline, methodical, research skills. The system-forming definition of the project defines media literacy, which is relevant in modern society.

Analysis of the latest research. The methodological foundations of higher pedagogical education are highlighted in the studies of A. Aleksyuk, V. Andrushchenko, V. Bondary, S. Vitvitska, O. Dubasenyuk, I. Zyazyun, M. Yevtukh, H. Ivanyuk, V. Kan-Kalik, L. Kondrashova, V. G. Kremen, V. Lugovoi, O. Pehota, S. Sysoeva, A. Trotsko and others. Tasks, forms, and conditions of effectiveness of the organization of research work of students in higher educational institutions are revealed in the works of N. Demyanenko, G. Klovak, O. Krushelnytska, V. Kuril, N. Puzyryova, etc. The mission of pedagogical practice in the system of professional-pedagogical training was developed in the studies of O. Abdullina, G. Kojaspirov, V. Kan-Kalika, S. Kulnevich, O. Savchenko, S. Sysoeva, V. Slastyonin, M. Koziy, P. Reshetnikov and others researchers Various aspects of students' research work during the practice period are revealed in works (O. Kysloi, V. Kondratyuk, O. Yakubchyk, O. Linnyk, O. Tsokolenko).

Purpose, subject and research methods

The analysis of the cited studies gives grounds for the conclusion that the organization and methodology of scientific research activity of future specialists are revealed in the studies of higher pedagogical education, the peculiarities of the organization of various forms of pedagogical training of the future teacher are highlighted. Searching for forms of optimization of professional-pedagogical training requires further research. Based on this, we aim to substantiate the effectiveness of the technology of the educational-scientific pedagogical project of studying the educational discipline and the organization of educational practice in the formation of research competence of future teachers.

Research methods. To realize the goal and set tasks at various stages of scientific research, the following methods are comprehensively applied: theoretical (analysis, synthesis, comparison, systematization and generalization of scientific sources) with the aim of clarifying the research problem, theoretical substantiation of the essence of the concept of "educational-scientific pedagogical project", development of its structure; empirical (questionnaires, surveys, conversations, observations, retrospective analysis of one's own pedagogical practice, expert evaluations, analysis of the products of students' educational and cognitive activities) in order to find out the effectiveness of the educational and scientific pedagogical project.

Research results

Presentation of the main research material. The educational and scientific-pedagogical project as a technology for the formation of students' research competence combined: the implementation of educational tasks of the discipline "Pedagogy", the organization of educational pedagogical practice, the development, and conduct of pedagogical research.

Project planning begins before the beginning of the school year. Under such conditions, it is positive that starting the school year, studying the educational discipline "Pedagogy", students have

time to realize the significance of their future educational work for primary school students, prepare for the implementation of practice tasks, try out fragments of educational cases in the academic classroom. The subject of the educational week, the content of the educational work, and the problem for student psychological and pedagogical research are laid out in cooperation with the head of practice, the deputy for educational work, and the deputy director of the school from the junior level. Thus, during the 2016-2019 academic years, the following content lines became the projects of the school and the university: the week of Cossack Glory (2016), the week of tolerance (Week of tolerance: the project of the school and the university, 2017), the week before World Children's Day (World Children's Day: the project of the school and University, 2018), Media Literacy Week (Media Literacy Week: School and University Project, 2019). The content of the joint project of the KU SSSH I-III degrees No. 17, No. 2 of Sumy and second-year students of the physics-mathematics and natural-geography faculties of Sumy State Pedagogical University named after A.S. Makarenko in the 2018-2019 academic year became a complex of educational, research and educational affairs united by a week of media literacy.

The rapid development of information and communication technologies and mass media requires purposeful training of the individual for useful and safe use of them. The main problem with the introduction of media literacy, according to Ms. Hrynevych, lies in the methodology, since "a teacher who does not know how to think critically himself cannot be sent to teach children this. He should be given tools. This was not the case in our Soviet and post-Soviet school culture - learning to think critically, ask questions, question, information security of children" (Media literacy should be introduced into the practice of every teacher). Normative provisions of media education are included in the Concept of Implementation of Media Education in Ukraine (Concept of Implementation of Media Education in Ukraine, 2016).

The team of scientists of the Institute of Social and Political Psychology see the adult's media-psychological mission as "helping the child to develop adequate guidelines for the media as part of the life world, to understand the peculiarities of the media reality and to master it in order to increase its resource capabilities and reduce the risks of negative influences" (Naydyonova, 2015, p. 39).

For students, participation in the project involved the development and conducting of a study of media literacy of elementary school students, a determination based on the analysis of the results of educational activities and their implementation during the period of educational practice. To actualize the problem of media competence, a more thorough understanding of its essence, and self-study, the students took part in a similar study of media literacy. Along with the role of researchers, students in the project also became respondents. Sophomores of Sumy State Pedagogical University named after A.S. participated in the online survey. Makarenko The size of the student sample population is 99 people, the student population is 360 people.

The study showed that all surveyed students are registered in social networks, 98% are registered in more than one network, the most popular are: Instagram (96%), Viber (93 %), Facebook (86 %) YouTube (79 %), on average future teachers spend more than 4 hours on social networks. Based on the obtained data, it can be considered that the use of social networks is common for modern students. Young people are aware of the mechanisms of functioning of networks and manipulation of consciousness: 29% of students believe that social networks are based on algorithms that study their interests and can control their attention; 43% – that they contain a personalized news feed; 18% are aimed at ensuring that the user spends as much time as possible online. The study of the motives for using social networks and dependence on them in the majority found: communication 96%, maintaining relations with friends and relatives 50%, entertainment 44%.

At the same time, 32% of students use the media as a resource for companionship, which allows for the development and maintenance of friendships. However, as the researchers point out, there are risks of overusing media for actual physical communication. First, mediated media relations create the effect of facilitated sociality - when you can easily get out of contact (on your own initiative by breaking the connection) in the event of any troubles, you don't have to learn to overcome them. Secondly, there is a risk of replacing real relationships with parasocial ones (one-way communication with media characters) (Naidyonova, 2015, p.36).

Rest, distraction from future problems, escape to virtual worlds from troubles, interpersonal troubles, or routine by means of social networks is typical for 45% of students. Social networks become a resource for filling the time forced to wait for 44% of students, 62% of students answered often, 21% rarely, 7% no. When Naidyonova notes that some users in social networks mostly monitor the lives of others and tell much less about themselves. While they observe others, their own lives pass in vain, i.e., in fact, in social networks there is an alleged living of "the lives of others" (Naidyonova, 2015, p.56).

A study of the emotional reaction to information on the Internet revealed that 54% of respondents indicate that after watching the news feed, they feel that their own life is not so interesting, they feel dissatisfaction with their own life. To the question "what emotions do you feel when you see the icon of the social network" 71% say indifference, 25% express a desire to open it sooner, 7% have no emotions. Such emotions as sadness, excitement, fear, shame, boredom, disappointment, security did not receive any response.

Comparing and evaluating by how much (from 1 to 10) the virtual image in the social network coincides with the real one, the students received the following self-assessment results: from 0 to 3 they did not receive any answer, from 4 to 6 - 11%, 7-8 - 47%, 9 -10 42%. Examining the attitude of students to social approval in the network, it is worth noting that in self-assessment, students in the majority (73%) show independence from approval, 21% indicate the importance of a positive reaction

to their own media products and the appearance of negative emotions in the absence of expected support.

V. Burova notes that constantly interacting with each other through online correspondence, sometimes users give more preference to online communication, spend more time online, are ready to spend money to support online communication (Burova, p. 64). Over time, a person may develop a pathological need to be constantly online, which he cannot get rid of on his own. To the questionnaire question "Will you use social networks if they become not free?": "yes, regardless of the price" - no answer was received; "yes, for an adequate price" - answered 14.3% of students; 25.% of students answered - "no, I will not pay" and it was difficult to answer for 39.3% of students. According to Lyuty, a certain dependence on social networks as a convenient tool for maintaining social contacts is a normal, culturally conditioned state of modern man (Lyuty, 2014, p. 39). Addiction is manifested in a person's constant or periodic experience of an uncontrollable and unquenchable desire for a certain activity, the inability to control the duration and intensity of this activity and coordinate it with other vitally important activities.

In our study, as mentioned above, the study of media literacy of students was considered to a greater extent as a means. Using the example of media literacy as a relevant quality for modern people, the effectiveness of the educational-scientific pedagogical project in forming the research competence of the future teacher was analyzed. Following the principles of project training, competency-based, student-centered, contextual approaches, its structure was identified and characterized (Table 1).

Table 1. The structure of the scientific-educational pedagogical project for the study of media literacy of primary school students

No	Deadline / educational and scientific tasks	Project products	
1.	Formation of creative groups	Creative groups, self-management of the project	
2.	The choice of the research direction of media	Individual and group research topics	
	literacy of primary school students		
3.	Development of diagnostic techniques	Questionnaires for selected areas	
4.	Pilot testing of diagnostic methods	Practical recommendations for improving	
		questionnaires	
5.	Expert assessment of diagnostic methods by	Expert recommendations for improving	
	school psychologists	questionnaires	
6.	Printing questionnaires	Questionnaires	
7.	Conducting a survey	Research results	
8.	Analysis of research results	Generalized research results in classes and	
		parallels of primary school students	
9.	Carrying out a system of educational and	Promotions, educational events	
	formative activities	Development of media literacy of schoolchildren	
10.	Writing scientific articles and methodical	Student articles	
	materials		
11.	Printing of collections of methodological	Student collections based on the results of the	
	developments and scientific articles	completed project	

The joint project of the school and the university included: 1) the development of diagnostic materials for elementary school students and the researchers themselves (students of the physics-mathematics and natural-geography faculties), methodical development of educational activities within the framework of studying the educational discipline "Pedagogy"; 2) pilot testing, expert assessment of diagnostic methods and methodical developments, printing questionnaires; 3) conducting a study of media literacy of students during the period of educational practice in elementary and basic school; 4) carrying out a system of educational and formative activities; 5) coverage of the obtained results, preparation for printing collections of methodological developments and scientific articles of materials.

On the basis of the study of the theory of the question, based on the results of the study of student questionnaires, the students, in cooperation with the teachers, determined the main four directions for the educational work of the stage of carrying out the system of educational formative activities of the educational and scientific project: netiquette, cyberbullying, social networks, cartoon and television social norms, media creativity and selfies. The topic was reflected in the educational week spent by students in the process of educational pedagogical practice. The planning of the educational week based on the results of the conducted research became a joint task of the student team of the school administration (Media Literacy Week: School and University Project, 2019, p.5).

Investigating the effectiveness of the educational-scientific pedagogical project, it is worth noting that 96% of students who participated in the project (EB) developed questionnaires, of which 58% of students received a positive expert assessment (18% received permission to conduct research without finalizing the methods); 47% of students formalized the results of the conducted research and submitted scientific articles for publication in a student monograph, in contrast to 12% of students who studied according to the traditional education system. The topics of the articles were: research on the phenomenon of cyberbullying among elementary school students, social networks and interests of elementary school students, media content and branding: priorities of elementary school students, research on the interests of younger students in real life and the Internet (Research on media literacy: school and university project, 2019).

Answers to the question "Is special educational work on media literacy important for students" were received in the experimental and control samples, respectively: yes - 69%, 43%; no -7%, 10%; don't know - 24%, 47%. The study of the researchers' understanding of the essence of the concept of media literacy in the experimental and control samples revealed a quantitative advantage (97% of the students who participated in the project formulated the definition, 53% of the students who studied under the traditional organization of education) and the qualitative priority of the answers of the experimental sample of students. Pedagogical conditions of the educational and scientific pedagogical project became: 1) integration of educational, practical and scientific components of pedagogical

training of future teachers as a single research problem; 2) approbation of educational achievement in the environment of the pedagogical process; 3) cooperation of the teaching team of the school (primary and primary school teachers, psychologists, social pedagogues) with a group of students in the development of project materials for their expert assessment; 4) practical orientation of educational tasks (work on lectures, practical classes, independent work of students), scientific research (materials for studying media literacy of students), methodical (development of methodical materials for the educational week), combining them into a single line of the project; 5) self-governance and the existence of a situation where everyone is responsible for the success of the project.

Conclusions from this study. So, the study considered the technology of the educational and scientific pedagogical project, which combined classroom learning and independent work of students, the implementation of educational tasks of the discipline "Pedagogy", the organization and conduct of educational pedagogical practice, and the conduct of pedagogical research.

Media literacy, which is relevant in modern society, is defined as the system-forming definition of the project. The media competence of students in the joint project of the school and the university was considered as the ability and readiness of the individual for health-preserving interaction with the media; competent search for information, its critical assessment; creative and responsible creation and distribution of media texts, self-presentation and self-realization by means of media; safe and civilized behavior and communication in a virtual environment.

Pedagogical conditions of the educational and scientific pedagogical project define: integration of educational, practical and scientific components of pedagogical training of future teachers in a single project; the prospect of approbation of the acquired achievements in the real pedagogical process; cooperation of students and teaching staff of the school; practical orientation of educational, scientific-research, methodical tasks, their unification in a single line of the project; student self-government in the project. Prospects for further research. To develop the scientific creativity of future teachers, further study requires an analysis of the effectiveness of the formation of research competence of future teachers in the educational-scientific pedagogical project.

REFERENCE

- 1. Burova V. A. Social and psychological aspects of Internet addiction [Electronic resource] / V. A. Burova. Source access mode: http://user.lvs.ru/vita
- 2. World Children's Day: school and university project: methodical recommendations / [in general edited by N. V. Kovalenko]. Sumy: S.P. Tsyoma FOP, 2018. 50 p.

- 3. Media literacy research: a school and university project: a collection of student research papers / N. V. Kovalenko. Sumy: [FOP Tsyoma S.P., 2019]. 104 p.
- 4. Kovalenko N. V. Educational pedagogical practice as a school and university project / Kovalenko // Pedagogical sciences: theory, history, innovative technologies: science. journal / Sumy state ped. University named after A. S. Makarenko. Sumy: Sumy DPU named after A. S. Makarenko, 2016. No. 6 (50). C. 188-196.
- 5. Concept of implementation of media education in Ukraine. http://balakliya-school2.edu.kh.ua
- 6. Lyuty V. P. Dependence on social networks as a problem of modern students [Electronic resource] / V. P. Lyuty, K. S. Kolomiets // Bulletin of the Academy of Labor and Social Relations of the Federation of Trade Unions of Ukraine. 2014. No. 3-4. P. 6-12. Access mode: http://nbuv.gov.ua/UJRN/VAPSV 2014 3-4 3.
- 7. Media literacy should be introduced into the practice of every teacher. http://www.ukr.life/uk/osvita/mediagramotnist-potribno-zaprovaditi-v-praktiku-kozhnogo-vchitelya-liliya-grinevich/
- 8. Naidyonova L.A. Media psychology: the basics of the reflexive approach: Textbook / L.A. Naidyonov; National Academy of Pedagogical Sciences of Ukraine, Institute of Social and Political Psychology. Kind. the second, rub. Kirovohrad: Imex-LTD, 2015. 244 p.
- 9. Media Literacy Week: school and university project: methodological recommendations for the organization of the educational week / [according to general edited by N. V. Kovalenko]. Sumy: S.P. Tsyoma FOP, 2019. 55 p.
- 10. Week of tolerance: school and university project: methodical recommendations / [according to general edited by N. V. Kovalenko]. Sumy: S.P. Tsyoma FOP, 2017. 56p.

ENSURING ADEQUATE MOTOR EXPERIENCE FOR PRESCHOOL CHILDREN IN THE MODERN EDUCATIONAL PROCESS

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Introduction. The preservation and enhancement of preschool children's health is a fundamental goal of their time spent in preschool educational institutions and within the family. Physical activity is not confined to specific types of activities; its provision throughout the entire day is a necessary condition for the sustainable development of children at this age. Motor activity is an integral component of the harmonious development of preschool children. It contributes to the formation of basic motor skills, the development of coordination, endurance, strength, and flexibility, and also has a positive impact on children's mental state and social skills. Ensuring the diversity and regularity of daily motor activity forms a sufficient level of motor experience in children, allowing them to apply appropriate physical efforts to specific situations, which increases their efficiency and reduces the risk of injury.

The issue of physical development in general, and ensuring sufficient motor activity in each age group, has been the subject of the researches by domestic and foreign scientists for a long time. Notable contributors to this field are E. Vilchkovsky, M. Yefimenko, A. Volchinsky, O. Malimon, S. Livonen, T. McKenzie, and others. The primary focus of the researches is on studying the possibilities of integrating physical activity into children's daily activities, using playing methods to stimulate motor activity, and creating favorable conditions for active recreation.

At the same time, a lot of questions remain unresolved. Ensuring adequate motor experience is associated with a wide range of accompanying tasks and problems, which can be outlined as follows:

The impact of socio-economic conditions on the level of preschool children's physical activity;

Effective directions for cooperation with parents in forming a habit of physical activity and a healthy lifestyle in children;

The influence and possibilities of integrating new technologies (mobile applications, interactive games, etc.) into the process of physical education for preschool children;

Ways to mitigate the negative impact of passive screen time at computers/mobile devices on children's physical activity;

Factors affecting children's motivation to participate in physical activities and self-perception;

The impact of physical activity on the emotional state and mental health of preschoolers;

The specifics of evaluating the effectiveness of existing physical education and development programs for preschoolers;

Ensuring inclusivity needs in the physical education of preschoolers.

Thus, the problem of ensuring an adequate motor experience for preschool children is extremely relevant and requires a comprehensive approach to its resolution. Modern pedagogical efforts should be aimed at creating favorable conditions for the active and healthy development of children, taking into account the contemporary challenges and needs of society. Taking into consideration all mentioned above, we think it is necessary to clearly outline the current forms of ensuring children's motor activity, their role, and place in the educational process.

Presentation of the Main Material. The entire period of preschool childhood is characterized by a high natural need for motor activity in children. This ensures optimal physical and mental development, as well as the efficiency of preschoolers in other types of activities. It also serves as an element of socialization and interaction at this age. According to the Basic Component of Preschool Education, a child's motor experience is a part of their motor competence, which also includes knowledge and skills, and the formation of a positive emotional and value-based attitude towards health and physical culture [1, p. 5].

It should be noted that ensuring an adequate motor experience requires the planning and implementation of various physical and health-related activities with children throughout the day, not just during specific sessions. Currently, the most relevant approach is to combine traditional and non-traditional forms of motor activity in the educational process. Traditional forms include physical education classes, morning exercises, physical breaks and mini-exercises, gymnastics after nap time, ecological trails, children's tourism, sports exercises, active games, games with sports elements, physical culture festivals, and health days. Non-traditional forms of motor activity that are appropriate to integrate into the educational process include elements of yoga, fitball gymnastics, Pilates for children, dance aerobics, flash mobs, etc.

The integrity of physical and health-related activities throughout the day is typically ensured by combining morning exercises (preparing all muscle groups for active physical and other types of activities) with physical education classes (a combination of posture correction and general physical training with the improvement of basic movements), gymnastics after nap time (awakening and mobilization of the body), and conducting physical breaks and mini-exercises, as well as various types of games throughout the day (posture and tiredness prevention). Playing activity is predominant

in preschool age, necessitating the incorporation of play elements into other types of motor activities. As Y. Babachuk notes, the play form of motor actions stimulates active participation and engagement of the child in this process [3, p. 147]. Changes in play practices are primarily determined by the age of the children and the educational goals. Children's motor experience includes both general physical training and the acquisition and improvement of basic movements such as walking, running, jumping, climbing (crawling, threading), and throwing. Accordingly, it is advisable to conduct thematic games with preschoolers of all age groups to ensure overall physical development and a positive emotional background. Performing movements tied to a specific theme allows the integration of various educational lines, the development of skills to coordinate one's actions with those of other children, and helps maintain a stable interest and attention among children [10]. We conduct non-thematic games (or play exercises) to improve basic movements with children of all age groups, which focus on the correctness and refinement of movements. For senior children, it is also advisable to conduct games with sports elements, such as soccer, basketball, table tennis, badminton, and others, using simplified rules. Such games promote the development of teamwork skills, teach children the rules, and engage a wide range of muscle groups [2].

Starting from early preschool age, it is advisable to hold physical culture festivals two to three times a year. These events reinforce ongoing physical and health-related activities, boost motivation for sports, and instill positive moral and ethical qualities in children. Festivals help to develop a sense of collectivism, friendship, responsibility, and mutual support among children. Additionally, they create an atmosphere of joy and fun, positively affecting the children's emotional state and promoting psychological comfort. Participation in these events helps children to realize the importance of a healthy lifestyle and sports, laying the foundation for future healthy habits.

Physical culture festivals require careful planning and preparation. The organization should consider the age and physical characteristics of the children, ensuring the safety and accessibility of all activities. The festival program can include various relays, competitions, team games, demonstrations, and sports contests. It is also important to alternate between active and calm tasks to prevent overexertion. Using bright sports equipment and musical accompaniment adds a festive atmosphere and encourages active participation. The event should last 40-60 minutes, depending on the age group, forming the basis of the child's motor activity for the day, and thus requires specific planning of other physical activities.

Forming a habit of systematic motor activity is crucial for ensuring an adequate motor experience in preschool children. Therefore, it is advisable to conduct health days once a month, which include a strong informational component. The health day program may feature various themed activities such as morning exercises, sports games, hygiene workshops, cooking lessons on healthy

eating, nature excursions, and other wellness activities. Preparation for the health day can include themed lessons where children learn the basics of a healthy lifestyle and hygiene rules.

An important element in ensuring a child's motor experience is children's tourism. Its main distinction lies in usinig natural elements rather than artificially created ones for physical development. It is advisable to effectively use specially organized nature routes, such as ecological traits for preschool children in the context of tourism. Using these trails allows to integrate effectively physical development tasks – improving overall physical fit, strength, endurance, flexibility, and coordination; cognitive development through familiarizing children with natural objects and processes, developing observation and research skills; fostering ecological awareness by nurturing a respectful attitude towards nature and understanding the interconnection between living organisms and the environment; and social development tasks such as cooperation, communication, and interaction skills during group tasks and games.

Overcoming such routes includes:

- A variety of movements, including walking, running, jumping, and climbing, which contribute to the development of most basic movements in addition to overall physical development;
- Developing coordination and balance through incorporating log and stone crossings (for older age groups);
- Stimulating sensory systems through contact with various surfaces while barefoot (grass, soil, leaves), enhancing tactile sensations and motor skills.

The preparation for overcoming ecological trails requires significant preparation, particularly concerning safety requirements. The safety of the trails, their accessibility for children, and the consideration of age-specific and physical capabilities must be taken into account during planning stage. The route should include stops with educational and physical tasks (e.g., observing plants, orientation tasks). It is advisable to use interactive elements such as informational plaques, riddles, and games to maintain children's interest [5].

Let us take a closer look at non-traditional forms of physical education and health activities. Their peculiarity is significant opportunities for integration into other types of physical activity, partial replacement or supplementation of their elements, flexibility and adaptability to the conditions of a particular institution. Learning elements of yoga with children in the physical education cycle of preschool education is characterised by unpretentiousness to the developmental educational environment and ease of implementation. This practice contributes to the development of physical qualities such as flexibility, strength, coordination and balance, and also has a positive effect on the

psycho-emotional state of children. Yoga helps to develop breathing, concentration and relaxation skills, which are important components for harmonious development at an early age.

Yoga integration into other forms of physical activity in preschool educational institutions and at home requires a systematic approach and consideration of children's age and physical characteristics. Specifically, yoga can be effectively combined with such physical activities as active games, morning exercises, post-nap gymnastics, dance classes, and sports competitions. For instance, yoga sessions can be included in morning exercises, preparing children's muscles and joints for further physical activity, thereby reducing the risk of injuries and enhancing overall motor function.

Yoga can be integrated into the educational process as an individual activity or as a part of comprehensive wellness initiatives, such as health days. During health days, yoga can serve as a restorative activity after intense physical exercises, promoting relaxation and reducing stress levels. Thematic yoga sessions can be conducted several times a week, adapted to the overall schedule of physical education classes in the preschool institution. We share L. Maksymenko's opinion that employing a greater variety of organizational forms for physical education classes enhances the effectiveness of children's motor activity [4, p. 332]. It is also worth noting that the content and goals of yoga sessions do not duplicate those of classical physical education classes, thus serving as a complementary factor.

The timing of yoga sessions can vary depending on the daily schedule and the goals of physical wellness activities. In the morning, yoga can be a part of the warm-up routine, promoting a gentle awakening of the body and preparing it for an active day. In the afternoon, short yoga sessions can focus on restoring energy and concentration, which is particularly important for enhancing the productivity of subsequent activities (integrating yoga into physical breaks and movement pauses). In the evening, yoga can help reduce activity levels, promoting calmness and preparation for sleep.

Special attention should be given to the methodology of conducting yoga sessions for children. Such sessions should be interactive and meet the age-specific characteristics of preschoolers. Using elements of play, fairy tale themes, and special equipment can make sessions more interesting and accessible for children, fostering their active engagement. For example, when performing asanas, children can mimic the movements of animals or natural phenomena, stimulating their imagination and making the sessions captivating [6, p. 262].

We propose a sample outline for a yoga session (as an individual type of physical wellness activity) for senior preschool children:

The duration is 30 minutes

The objective is physical qualities development (flexibility, strength, coordination, balance), improvement of emotional state, learning relaxation and concentration skills.

Introduction (5 minutes)

1. Greeting and Setting the Mood:

The instructor greets the children and explains the purpose of the session. A brief talk about yoga and its health benefits. Ask the children to sit in a circle, cross-legged, and take a few deep breaths.

2. Warm-Up:

It is advisable to use a current set of general developmental exercises learned by the children.

Main Part (20 minutes)

1. Tree Pose (5 minutes):

Explain to the children that they will be trees firmly rooted to the ground. Demonstrate how to shift weight to one leg and lift the other, placing the sole on the inner thigh or calf of the supporting leg. Ask the children to raise their arms overhead, joining their palms. Perform several attempts, changing legs, to help the children feel balance.

2. Cat-Cow Pose (5 minutes):

Explain to the children that they will be cats and cows. Demonstrate how to inhale while lowering the belly and raising the head and buttocks (Cow Pose), and exhale while arching the back upwards and lowering the head (Cat Pose). Repeat the movements with the children, paying attention to their breathing.

3. Butterfly Pose (3 minutes):

Explain to the children that they will be butterflies fluttering their wings. Demonstrate how to sit with the soles of the feet together and lower the knees to the floor. Ask the children to gently lower their knees, mimicking the flapping of butterfly wings.

4. Cobra Pose (3 minutes):

Explain to the children that they will be cobras lifting their heads from the sand. Demonstrate how to lie on the stomach, lifting the upper body as you inhale and lowering it as you exhale. Repeat several times, focusing on the smoothness of the movements.

5. Mouse Pose (4 minutes):

Explain to the children that they will be little mice resting in their burrows. Demonstrate how to sit on the knees, lowering the torso forward and placing the forehead on the mat. Hold the pose with the children, breathing deeply and relaxing.

Conclusion (5 minutes)

1. Relaxation:

Lie on the back, arms along the body, legs slightly apart. Ask the children to close their eyes and imagine themselves on a beautiful meadow, listening to the birds singing. Remain in this pose for 2-3 minutes, accompanied by soft, calm music.

2. Summary and Farewell:

Ask the children to sit in a circle and share their impressions. End the session with a few deep breaths and thank the children for their participation, wishing them a good day.

Another relevant form of ensuring sufficient motor experience for preschool children is fitball gymnastics. Fitball gymnastics has a comprehensive impact on the overall children's physical development and can be used to enhance specific basic movements (such as jumping and coordination). Fitball exercises maintain high levels of motivation among children due to their playful nature and the opportunity to perform various movements. These exercises can be integrated into daily physical activities and included in special wellness programs, such as health days or physical activity weeks.

The methodology for conducting fitball gymnastics sessions should consider the developmental characteristics of preschoolers and provide a variety of movements. Fitball exercises can include jumping, rolling, rotating, and balancing, which contribute to the overall development of the muscular system and improve coordination of movements.

Fitball gymnastics can also be used to correct posture disorders and prevent musculoskeletal diseases. Exercises on fitballs help to strengthen the back and abdominal muscles, promote proper breathing, and enhance overall body strength. Corrective exercises on fitballs can be recommended for children with posture problems under the supervision of specialists [7, p. 137].

Another option of untraditional forms of physical activity that can be implemented in preschool educational institutions is Pilates for children. The main goal of using Pilates is to develop correct posture, improve muscle tone, and enhance internal stability and body control. Pilates also aids in developing concentration and attention in children, positively affecting their overall psychoemotional state.

The peculiarities of using Pilates for preschool children lie in the need to adapt the exercises to their physical abilities. Exercises should be simple, short, and engaging to maintain the children's attention and ensure their active participation. Children's Pilates includes floor exercises, the use of special balls and bands, which helps to develop different muscle groups and maintain interest in the activities.

Pilates is appropriate in preschool settings as it promotes the development of physical qualities necessary for the harmonious growth of a child. The researches show that regular Pilates sessions can reduce the risk of developing posture disorders, help to correct existing musculoskeletal issues, and improve the overall physical fitness of children. Additionally, Pilates enhances coordination and flexibility, which are crucial for mastering other types of physical activities successfully [8, p. 9].

The recommendations for conducting Pilates exercises with preschool children include the following aspects:

- the exercises should be structured to ensure a smooth transition from simple to more complex movements;
- it is recommended to start sessions with breathing exercises and muscle warm-ups. Breathing exercises help children to learn to control their breathing and focus on movement execution. For example, deep breathing with a slow inhale through the nose and exhale through the mouth promotes relaxation and increases attention.

The main part of the session can include 5-6 exercises targeting different muscle groups. For example, the "Flying Dog" exercise aims to strengthen the muscles of the arms, legs, and back. Children get on their hands and knees, extend one arm forward and the opposite leg backward, maintaining balance. The "Bird" exercise helps to strengthen abdominal muscles and improve coordination. Children lie on their backs, lift their legs at a 90-degree angle, make small lifts of the upper torso, and perform short arm movements, imitating wing flaps. It is recommended to finish the session with stretching and relaxation exercises.

The Pilates integration into the educational process of preschool institutions involves systematic planning, methodological adaptation, teacher training, and creating a safe and conducive environment for classes. Teacher training is a key element of the successful Pilates integration into the educational process. Educators and physical education instructors must undergo specialized training, which includes knowledge of Pilates basics, teaching methods for preschool children, and skills to create safe and effective sessions. It is important for teachers to understand the anatomical and physiological characteristics of children of this age and to be able to adapt exercises accordingly.

Creating a conducive environment for Pilates classes includes preparing the room and providing the necessary equipment. The room should be spacious, well-ventilated, with sufficiently soft floor coverings or mats for classes. Equipment may include Pilates balls, bands, soft blocks, and other tools that facilitate exercise performance.

An important aspect of Pilates integrating is ensuring safety during classes. Teachers must monitor the correct execution of exercises by children, avoid excessive loads, and ensure an individual approach to each child. Exercises should be performed at a slow pace, focusing on proper breathing and control of movements.

Dancing aerobics is an effective means of physical and wellness development, aimed at improving physical qualities, developing movement coordination, and rhythm in children. The main goal of using dancing aerobics is to foster a positive attitude towards physical activity, stimulate children's interest in motor actions through musical-rhythmic exercises and dance movements. An important component is the development of musical hearing, a sense of rhythm, and the creative abilities of children.

The peculiarities of using dancing aerobics in preschool institutions lie in the need to consider the age and individual characteristics of children. Sessions should be designed to ensure a smooth transition from simple movements to more complex combinations. Dance movements should be easy to learn, include elements of play and imagination, allowing children to maintain interest in the sessions. Musical accompaniment plays a crucial role in dance aerobics as it helps children better perceive the rhythm and tempo of movements, stimulating emotional uplift and motivation to perform exercises [9, p. 331].

The recommendations for conducting dance aerobics sessions with preschool children include several key aspects. The sessions should begin with a warm-up that includes simple exercises to warm up the muscles and prepare the body for the main activity. For example, the warm-up can include light running exercises, on-the-spot jumping, arm and leg swings to cheerful music. The main part of the session consists of performing dance combinations that gradually become more complex. Movements should be varied and engage all major muscle groups. It is important that movements match the musical rhythm, helping children better navigate the exercises.

The final part of the session should include relaxation and breathing recovery exercises. These can be slow dance movements or stretching exercises to calm music. For example, children can perform body bends, arm and leg rotations while sitting on the floor, which helps muscles to relax and recover after physical activity.

Flash mobs are a relevant form of ensuring children's physical activity. Flash mobs are short, massive and synchronised motor actions to music, and have a significant potential in forming a positive attitude to physical activity, developing coordination of movements, rhythmicity and general physical fitness of children.

The unique features of flash mobs include their ability to create emotional uplift and involve a large number of children in active participation. They can be conducted as a part of daily physical activities as well as during festive and thematic events, making them a versatile tool in the physical education of preschoolers. Flash mobs promote the development of social skills such as cooperation, teamwork, and the ability to follow instructions. They are best conducted outdoors or in spacious indoor areas, which provide sufficient space for movement and ensure the safety of children. It is important to choose a time for flash mobs when children are the least tired and most ready for physical activity. Optimal times are in the morning or early afternoon after breakfast, when children are full of energy.

The flash mobs organization involves preparing simple and comprehensible choreographic movements that children can easily repeat. Using music with a bright rhythm and clear lyrics helps children better follow the movements. It is essential to ensure that the music is age-appropriate and matches children's preferences, thereby increasing their motivation to participate.

An example of a flash mob could be an event where children, along with their educators, perform a series of simple exercises on the spot to cheerful music. These exercises might include knee lifts, arm swings, body bends, and rotations. Another example is a dance flash mob, where children perform easy dance moves in a group, following the educator's instructions. This can include dances with elements of favorite children's songs or fairy tale themes, stimulating the children's imagination and creativity.

Flash mobs can also be organized during thematic sessions, such as "Health and Sports" or "Nature and Us", where physical activities are combined with educational elements. For instance, during an "Ecological Quest" flash mob, children can perform movements related to ecological themes, such as imitating the movements of animals or plants.

Conclusion. Ensuring an adequate motor experience for preschool children in educational institutions is a crucial aspect of their physical, mental, and social development. The use and combination of various standard and non-standard forms of physical activity allow to create a multifaceted and comprehensive physical education program that considers the individual needs and interests of each child.

Standard forms of physical activity, such as morning exercises, active games, and physical education classes form the basis of physical activity in preschools. They promote the development of basic physical qualities: strength, endurance, speed, coordination, and flexibility. Regular engagement in these activities helps children to develop fundamental motor skills necessary for their further physical development. Moreover, active games and sports competitions foster team spirit, communication skills, and the ability to cooperate.

Non-standard forms of physical activity, such as flash mobs, yoga, Pilates, dance aerobics, and fitball gymnastics, introduce elements of innovation and variety into physical education and health-related activities. These activities diversify children's physical routines and increase their motivation to engage in physical exercise. For example, yoga and Pilates enhance flexibility, balance, concentration, and relaxation. Dance aerobics and flash mobs combine physical activity with music, which stimulates emotional uplift and improves children's moods. Fitball gymnastics, involving the use of special balls, develops muscles, coordination, and balance, adding playful elements to the exercises.

Combining standard and non-standard forms of physical activity ensures a comprehensive approach to developing children's motor skills, considering various aspects of their development. The use of non-standard physical activities helps to adapt the physical education and wellness programs to the individual characteristics of children, ensuring an inclusive approach and encouraging each child's active participation.

References:

- 1. Bazovyi komponent doshkilnoi osvity / Naukovyi kerivnyk : T. O. Pirozhenko. K.: Vydavnytstvo, 2021. 37 s.
- 2. Vilchkovskyi E.S., Kurok O.I. Teoriia i metodyka fizychnoho vykhovannia ditei doshkilnoho viku: Navch. posib. Sumy: VTD «Universytetska knyha», 2008. 428 s.
- 3. Babachuk Yu. Navchannia ditei 6-ho roku zhyttia ihor z elementamy sportu v umovakh suchasnoho doshkilnoho navchalnoho zakladu. Visnyk Hlukhivskoho natsionalnoho pedahohichnoho universytetu imeni Oleksandra Dovzhenka. 2015. Vyp. 29. S. 147-155
- 4. Maksymenko L. Zastosuvannia rekreatsiinykh tekhnolohii dlia zmitsnennia zdorovia ditei 5-ty i 6-ty rokiv cherez spivpratsiu doshkilnoho zakladu osvity i simi. Fizychna kultura, sport ta zdorovia natsii: zbirnyk naukovykh prats. 2014. Vyp. 18. 372 s.
- 5. Kobenok H., Yatsenko S. Ekolohichni stezhky yak osoblyvyi vyd zdoroviazberezhuvalnykh tekhnolohii. Fizychne vykhovannia, sport ta zdorovia liudyny: dosvid, problemy, perspektyvy: materialy Vseukr. nauk.-prakt. konf., 17 bereznia 2017 r., m. Kyiv. 272 s.
- 6. Oliinyk L. Vzhyvannia praktyk yohy u dystantsiinii doshkilnii osviti. IV International Scientific and Practical Conference «SCIENTIFIC PRACTICE: MODERN AND CLASSICAL RESEARCH METHODS». May 26, 2023; Boston, USA. 389 p.
- 7. Kurchak T. Suchasni tekhnolohii ta innovatsii fizkulturno-ozdorovchoi roboty z ditmy starshoho doshkilnoho viku. Aktualni problemy nastupnosti doshkilnoi i pochatkovoi osvity : zbirnyk materialiv VI Mizhnarodnoi naukovo-praktychnoi konferentsii . Kyiv : Milenium, 2020. 274 s.
- 8. Temna A. Vykorystannia netradytsiinykh ozdorovchykh tekhnolohii u fizkulturnii roboti z doshkilnykamy. Almanakh psykholoho-pedahohichnoho dosvidu Naukovo-metodychnyi zhurnal. 2017. № 3. 120 s.
- 9. Sobol T., Titarenko S. Rozvytok fizychnykh yakostei u starshykh doshkilnykiv zasobamy step-aerobiky. «Sport ta suchasne suspilstvo»: Materialy KhIV Mizhnarodnoi studentskoi naukovoi konferentsii [Elektronna zbirka materialiv KhIV Mizhnarodnoi studentskoi naukovoi konferentsii «Sport ta suchasne suspilstvo»]. Kyiv: Natsionalnyi universytet fizychnoho vykhovannia i sportu Ukrainy [elektronnyi resurs]. 19 bereznia 2021. 333 s.
- 10. Sutapa, P., Pratama, K. W., Rosly, M. M., Ali, S. K. S., & Karakauki, M. (2021). Improving Motor Skills in Early Childhood through Goal-Oriented Play Activity. Children, 8(11), 994. https://doi.org/10.3390/children8110994

DEVELOPMENT OF SOCIAL CREATIVITY OF FUTURE SOCIAL WORKERS AT AN INSTITUTION OF HIGHER EDUCATION

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Summary

Results of substantiation and implementation of the methodology for development of social creativity of future social workers at the institution of higher education, taking into account contemporary challenges and threats, are presented. It is noted that social creativity is characterized by freedom of choice, positive social orientation, motivated personal initiative, interest and sufficiently high quality of innovative, independent organizational actions. The creative component in traditional activities of a specialist in the social sphere is described, in particular during implementation of technologies of social adaptation, therapy, and rehabilitation. The issue of developing a methodology for branching of the remote educational space as one that possesses signs of a combination of teaching and educational components, is characterized by interactivity, possibility of operational communication, integration of various means and tools, and creativity in decisionmaking, was actualized. Content components of educational disciplines are characterized, which provide phases of arbitrary and logical search, intuitive decision, verbalization of intuitive decision, formalization of verbalized decision. The process of social creativity is highlighted, which brings understanding of social work to a new qualitative level as a factor in activation of public forces of help and self-help, which makes society and the state stronger under difficult circumstances and contributes to the discovery of a resource for improving social relations, in which the social worker is assigned the role of a leader. It has been proven that organization of educational activities at a higher education institution ensures the formation of social creativity of future social workers under the condition of combining the efforts of educational and extracurricular processes, resources of a remote form of educational interaction. The developed technology for development of social creativity of future specialists has proven its effectiveness.

Keywords: social creativity, future social worker, institution of higher education, educational and professional program, socio-pedagogical technology.

Introduction

Contemporary system of higher education of Ukraine is in a state of extreme reformation under conditions of military operations. Scientific and pedagogical workers, together with other stakeholders of the education process, participate in improvement of educational and professional programs, educational components and the logic of teaching the material of educational courses. In particular, this concerns the professional training of future social workers. At the same time, students of higher education, as equal subjects of the education process, take an active part in the process of educational interaction for further implementation of skills during practical training and professional self-realization. To carry out professional tasks, future social worker acquires competences that allow to fully reveal all the advantages of professional activity. Also, at a higher education institution, personal and professional qualities of applicants are developed, in particular, social creativity for specialists in the social sphere. However, forced introduction of remote education and the need to make the process of providing professional education safe due to hostilities in our country poses the task of creating educational, socio-pedagogical conditions in order to continue to ensure social and professional development of future social workers. Development of creative abilities and creativity of future social workers was studied by L. Derevyana (creativity of a social pedagogue as a structural component of professional training); Y. Nikonenko (the concept of a social worker's creative potential); L. Petryshyn (the content aspect of formation of creativity of future social pedagogues as a guarantee of effectiveness of their professional activity); M. Kolotylo (philosophy of creativity in a social worker's professional activity); V. Shediakov (social creativity and innovativeness of strategic management); N. Kabus (professional creativity of a social pedagogue: essence and main directions) and others. Technologies of socio-pedagogical work, in particular under conditions of military threats, were reviewed by M. Maksymovskyi, A. Ryzhanova and others.

Aims, subject and method of research

The aim of the article is to characterize the process of development of social creativity of future social workers, to highlight the specifics of the combination of learning and education in the remote educational space for development of social creativity of students of higher education, to provide an example of the use of remote education tools for development of social qualities of students, in particular, social creativity of specialists in the social sphere.

The subject is educational conditions for development of social creativity of future social workers as a process and a result of social maturity of a specialist in the social sphere.

Research methods. Throughout the study, analysis of definitions, in particular the creative component, of social creativity in development of future social worker's personality was applied. Methods of synthesis and generalization of scientific data and practical training methods were used to determine characteristic features of this process. Explication of obtained information was used to explain the method of building a remote educational environment. Methods of comparison and scientific ascertainment provided the basis for development of socio-pedagogical technology for

development of social creativity of students in the educational, particularly remote, environment of a higher education institution.

Research results

At first glance, a social worker is not a specialist whose performance of professional tasks is directly related to creative activity. But this point of view can be refuted if we mention the sociopedagogical, socio-cultural directions of work, as well as civic project activities of this professional. It is a proven fact that in the near future those professions that are directly related to creative solutions (managers, artists, scientists, teachers, etc.) will remain in demand. A creative approach in a social worker's work determines his ability to carry out professional activities, avoiding unnecessary templates, to approach the solution of professional tasks in a non-standard way. In scientific literature, there is a traditional approach of considering social worker's creativity through the prism of his implementation of social work technologies. Combination of specified functions and the established approach provide an opportunity to characterize the characteristic features of the work of a specialist in the social sphere.

As L. Petryshyn believes: "In the process of training specialists in the social sphere, it is necessary to provide students with not only professional, but also creative competence, which will contain such two components – personal and operational. The structure of the personal component includes the following components: ability for pedagogical creativity, ability to set and solve non-standard tasks, developed associativeness, imagination, intuition, a sense of beauty. The structure of the activity component includes the following components: skills and abilities to use professional knowledge and produce new creative ideas on their basis; a system of communicative skills (mastery of social communication norms), ability to overcome stereotypes, ability to implement creative technologies in professional activities, research, design, socio-pedagogical skills" [8, p. 130]. We agree with the scientist's position, noting that a social worker is one of the specialists who is difficult to replace in the era of modern technology development, therefore it is the creative component of the activity that ensures they are in demand and realize themselves, since decision-making under conditions of uncertainty is a contemporary priority of activity in the field of human-group-society.

Social work is a type of activity that involves technologization of social processes, provision of assistance, and stimulation of mutual assistance to people who find themselves in difficult life circumstances. In our opinion, nowadays the social worker's mission expands to a leader of public opinion, to an escort under conditions of danger, to a manager of social projects and supporting spaces. Considering functional obligations of a social worker, we should note that in modern Ukraine they are becoming even more significant, since a large number of social issues arising during the war and difficult circumstances caused by military actions lead to the need to review the very basis of social work. However, appropriate technologies remain the key.

In search of creative component in social sphere specialist's work, we will first of all pay attention to diagnostics technology, which involves not only ascertaining the circumstances, but also certain rethinking of them in order to determine further actions. A specialist in the social work field should not treat the received data uniformly, which means that already at this stage it is possible to state the use of creative approach.

During implementation of social diagnostics, indicators of a healthy society, well-being of citizens, stable social functioning and the necessary perspective of further social development should be compared. Existence of a social assistance system, provision of social services is constantly being transformed and involves prompt response to challenges and threats. Starting from diagnostics procedures, further activity strategy is determined, which makes the system stable. For qualifying work, a social worker must model the system's components and its pattern in general. This cannot happen without creative rethinking and making the necessary decision. That is why, starting with diagnostics, already established actions should be used along with those that offer a non-standard approach. It is exactly the one that allows us to combine already proven technologies and take the necessary step forward, which is extremely important under conditions of the spread of war trauma, destruction, pathological disorders, mutilation, and the search for additional resources to overcome them.

Well-being of citizens, the need for social support from the state, society, and the public, depends on effective functioning of the social work system and each individual worker. This is a question of responsibility, designing the necessary ways of help and support, determining extremely difficult conditions and finding resources for organizing the support of clients and various social groups. An objective description of the situation that arose and caused the issue, or the one that requires mobilization of the community, depends in particular on teamwork capabilities of specialists, who possess the necessary, including creative, competencies. Ability to compare external negative circumstances, latent causes of an unstable situation, predict consequences, prospects and attract the necessary efforts is the essence of diagnostics using creative approach.

Social adaptation and social prevention, which we consider to be the following general technologies of social work, are of decisive importance, because during their effective implementation, it is possible to create conditions for prevention of many other social issues. Therefore, social adaptation involves determining those periods in a person's life and the stage of group development that may prove problematic. The main task of these technologies is anticipatory action, which must be designed by a specialist using creative technologies, a personal approach, and determining detailed characteristics of the group that needs intervention. Therefore, a conscious, purposeful, specially organized activity to prevent possible deviations and issues, built by a specialist on the basis of organization, ingenuity, non-standardization, is the basis of the necessary activity to

prevent negative consequences. By assisting in social adaptation of an individual, aimed at harmonizing the requirements and expectations of the social subject and the environment, the social worker contributes to activation of the client's creative abilities and reserves. Social prevention, as a general social technology, is designed to reveal the professionalism of a social worker in order to activate creative resources of individuals and groups.

Regarding social therapy as a technology of social work, its essence is found in overcoming already existing issues of social subjects, ensuring further adequate social functioning. That is, there are factors in the environment that negatively affected and changed human behavior. To correct the situation, creative abilities of both the specialist and the client who embarked on the path of therapy are particularly needed. Joint efforts lead to non-standard solutions in each specific situation. Creative efforts of a specialist activate creative efforts of a person who needs therapy, first and foremost in relation to their own life.

Social rehabilitation as a universal technology of social work is extremely important for Ukraine today. It is a set of actions that make up a system of restoring lost connections or skills. Social rehabilitation is aimed at strengthening social subject's personal capabilities, forming life skills. Creative abilities of a social work specialist contribute to overcoming the resistance of the person with whom the work is conducted in relation to the unusual, which arises as a result of drastic social changes. The best means of reshaping a client's negative thinking, a tool for forming prospects for life, learning new ways of existence in society, is turning to creative type of thinking, which can only be facilitated by a creative specialist.

During implementation of social counseling as a social work technology, real creative skills are necessary, in particular, creative search, ability to see another person's position, avoid conforming decisions, a bold attitude to changes and innovations. Creative search for client's potential and imagining future prospects provide for joint activity of a specialist and an individual to solve the subject of consultation with subsequent positive development of events. Summarizing creativity as a component of social worker's professional activity, we note that during its performance, a specialist realizes the following abilities: propensity for hypotheticals, variability in solving tasks; ability to improvise in different situations; to transfer as an ability to act in new non-standard conditions; to think divergently, being related to generation on the basis of unambiguous data of a set of solutions to an existing problem and including such indicators as identifying and posing problems, originality, producing various ideas, improving the object by adding details, proclivity to use symbolic, associative means to express their thoughts, etc.

So, the creative component is contained in the content of all professional activities of a social worker. However, the actual process of social creativity, which brings understanding of social work to a new qualitative level, is now being rethought. This is a deep process of activation of public forces

of help and self-help, which makes society and the state stronger than the need to purely help under difficult circumstances and provokes the discovery of a resource to improve social relations, in which a social worker is assigned the role of a leader.

Social creativity in the general sense is interpreted as a process and a result, the result of which is emergence of new productive forms of interaction between people, new formats of social activism, which was especially actualized during military operations in our country. Student youth add their efforts to balanced and spontaneous volunteering, and higher education institutions accumulate efforts to help in this difficult time.

As noted by V. Shediakov, "Direction, intensity and structure of social creativity depend to a significant extent on the value-meaning complexes of cultural and civilizational worlds. Development of value-meaning complexes of cultural and civilizational worlds belongs to priorities of ensuring national interests: this ensures, subjectivity of the people, its ability to socially and politically mobilize for implementation of its Master Project, which preserves its self-identification and ensures its further improvement in the forms provided by history" [10, p. 45]. Thus, provision of ways to develop social creativity by social workers lays the foundations for further social development based on humanism, self-organization, and mutual assistance.

The main idea of social creativity is the necessity and possibility of influence on the course of social interaction, aimed at meeting mainly public needs and interests. At the level of an individual, it is a social quality, a component of high-level sociality. At the same time, social creativity is a specific form of solving social contradictions and involves emergence of a new format or trend that has social significance. In our opinion, under conditions of higher education, involvement in sociocreative activity can cause difficulties due to lack of direct group consolidation, which conditions this process, however, it contributes to development of a solidarity position, provides impetus and stimulates creative solutions to overcome the contradictions of social life.

The essence of student youth's social creativity is understood as an active attitude of young people towards the world, an ability to carry out socially significant transformations of the material and mental environment, and also virtual and informational ones within the limits of remote educational platforms under contemporary conditions. Social creativity of this group of young people manifests in socio-creative activity, it is characterized by freedom of choice, positive social orientation, motivated personal initiative, interest and sufficiently high quality of innovative, independent organizational actions aimed at designing and implementing a creative initiative in the form of socially significant actions, events, associations, organizations, movements, etc. [6, p. 275]. In our opinion, this should take place at a higher education institution and remote educational space, which is in demand today, especially taking into account the fact that rapid mastery of new

communication tools and interaction with the use of information technologies is characteristic of today's youth.

Social creativity of students as a social subject is characterized by stable informational and communicative, social interests and needs, personal initiative, predominance of altruistic motivation, readiness to take responsibility for socially significant actions that are initiated, a dominant tendency to social innovations in the virtual space, a high level of professional and citizen-oriented project, organizational and communicative knowledge and skills, a socially positive style of organizational work. The criteria for development of social creativity of future social workers are: motivation-value, cognitive and personality qualities, activity-behavior. Indicators of motivation and value criterion: interest and value attitude towards professional and social life; pro-social motivation for life in society; formation of social needs in the field of public interaction. Indicators of cognitive and personality qualities criterion: propensity for innovation in social and professional sphere, search and organization in society, social creativity in education and extracurricular activities. Indicators of activity-behavior criterion: co-creation with others within the scope of realization of professional and social interests, creation of new models of activity under conditions of contemporary society, active and responsible participation in social transformations of a professional and social direction.

As a future member of the profession, "a social worker provides solutions to many social, psychological, pedagogical, ethical, legal problems of society and people; they prevent the development of negative trends in society, contribute to improvement of mental and physical health, development of opportunities for self-realization of each person, and improvement of the quality of their life. Creative potential is the level a social worker's labor potential, which is related to activity and self-development of their resources and opportunities in a certain activity" [7, p. 176]. Therefore, development of social creativity of future social workers takes place at the higher education institution by means of providing quality educational services and involvement of students in extracurricular activities. In particular, the content element of educational components is diversified according to the step-by-step deployment of creative activity.

The first phase of an arbitrary and logical search, within which a social worker actualizes the knowledge necessary to solve the task set before them (overcoming the consequences of a difficult life situation, establishing and eliminating its causes, in particular during harsh military events or a traumatic situation), selects substantiated facts, which contribute to an effective solution of the problem, carries out generalization and transfer of previously acquired knowledge to new circumstances, substantiates hypotheses, applies methods of comparison, analysis and synthesis. Therefore, social worker's conscious perception of the perspective of activity and resources for obtaining the desired result is formed. This should be modeled during the education process to train competent specialists. Within the framework of educational components, theoretical topics and

practical tasks should be offered, solving which the student of higher education practices in creatively solving the problems of individuals and groups in contemporary society. Brainstorming, lateral gap methods, mental maps, fishbone, etc. are actually used.

The second phase is an intuitive decision. This phase is characterized by an unconscious search for a way to solve problems. Conditions for the onset of this phase are social worker's high level of search motivation, a clearly and simply formulated task, and a lack of standardization of a method of action to achieve the goal. Unquestionable awareness of activity at this stage is reduced, the found solution looks unexpected and heuristic. For example, educational components that involve the study of theoretical foundations of social work and relevant technologies should include a creative component during educational interaction. The teacher organizes business and social games, interactive training exercises, impromptu visualizations, collective online presentations, etc.

At the third stage, there is a phase of verbalization of an intuitive decision. This involves implementation of an explanation and verbal presentation by the social worker of the obtained method of solving the problem. The basis of awareness of the result and the way to solve the problem is inclusion of the social worker in the process of interaction with any other subject, supervisor or representative of a public organization. Therefore, in the process of consolidating the educational material during seminar classes, options for non-standard approaches to solving the tasks should be discussed. Educational quests, workshops are organized, socially-oriented online events are created, which contribute to unity and development of social responsibility of students.

The fourth is the phase of formalization of the verbalized decision. At this stage, the task of logical design of the method of solving the creative task is formulated. The process of formalization of the decision by the social worker takes place on a conscious level. After successful completion of the analysis and understanding of their actions, the social worker combines and formalizes them into a new approach to professional activity and includes it in their professional toolkit. Thus, within the framework of education, creative studios of public activity, master classes for promotion of social initiatives, personal portfolio of the future social worker, competitions of educational student projects, development of social work programs in a specific case and in a specific environment should be used.

In view of the above, search, justification, invention of a non-standard solution to a specific problematic situation of a client, search for a variant of actions in case of insufficient effectiveness or an absence of positive trends promotes usage of creativity in social work and involvement of creative abilities of a social worker. Therefore, currently, during training of social work specialists in the higher education system, in addition to implementation of already existing educational standards in the specialty, it is necessary to ensure development of creative qualities, which will further contribute to formation of highly professional personnel, as well as general progress in social work as theory, practice, educational activity.

We agree with the opinion of M. Kolotylo, that "a creative person can be recognized by characteristic features of their thinking, including: the ability to create original ideas; the ability to develop an idea and implement it; the ability to easily and quickly move from one type of activity to another, to easily reorganize existing experience" [4, p. 76]. We believe that during full-fledged organization of the components of the education process, in particular education and extracurricular activities, taking into account the remote component, conditions can be created for active development of social creativity of future social workers. When providing educational services, it is necessary to take into account the social and creative component, which is the quintessence of the improving activity of social workers. Since the structure of this component consists of motivational, cognitive, operation-creative, initiative-heuristic, emotion-motivation, evaluative elements, all the specified components should be reproduced during training and extracurricular activities of student youth.

Motivation for social improvement already during education is formed by ensuring the presence of stable interests in transformations and their manifestation in extracurricular activities. Contemporary trends to improve the conditions, means, and resources of the existence of the object and subject of interaction should be introduced. Students should feel their own significant role of participation in positive socially oriented activity and see the perspective of their leadership. Creative self-expression rises to a high level if there is a sense of belonging to events and effectiveness of what is happening. For example, participation in activities of public organizations and volunteer groups already during training, etc. In this way, the importance of professional self-realization, the originality of solving professional tasks is stimulated. Motivation must be firmly based on the foundations of cognition – professional knowledge that must be connected with practice. Study of contemporary problems, crisis phenomena in society, possibilities of their regulation, impact on various social groups, technological support of social work for the future. Constant monitoring of what is happening in practice, study of theoretical sources, will create prerequisites for conscious and justified interest in improving social processes that affect the lives of individuals and groups. Formed stable knowledge about professionally determined types of creativity reflects the way of applying social creativity in the profession, based on existing experience, reproducing it in real social practices.

Possession of non-unified approaches to the profession reflects the operational and creative component, namely the ability to adapt existing technologies and create unique models of professional interaction. From establishing an in-depth social diagnostics to attraction of the necessary resources, from application of the latest research methods to organizational mechanisms for implementation of a creative idea.

No less important than the others is the initiative-heuristic component, which indicates rejection of stereotyped decisions, ability to act independently, inclination to creative initiative, ability

to see the anticipatory conditions for emergence of issues, contradictions that must be resolved in order to overcome the situation or create favorable circumstances for functioning of the subject of society.

We also take into account the fact that "creativity is determined by emotional belonging to the professional community/circle of clients, and therefore latest approaches or adopted decisions are not limited to obtaining personal satisfaction from the work performed, but also form the values of social work – truth, compassion and mutual trust. Positive attitude towards one's work stimulates social worker's creative energy and encourages the search for new forms of activity" [4, p. 76]. Thus, the emotion-motivation component of socio-creative activity of a social worker illustrates their enthusiasm for interesting activities, inquisitiveness on the way to solving complex tasks, emotional perception of a situation of success, mobilization of creative means in the profession.

The final component in the proposed cycle is the evaluation component, which crowns the entire social-creative process, as it involves self-analysis, reflection, and criticality in evaluating work results. Maintaining objectivity at this stage indicates social maturity, the ability to creatively solve complex professional tasks.

The need of student youth for urgent personal and professional self-realization, in particular social creativity, actualizes extracurricular activities of higher education institutions, which are characterized by free choice, democracy, stimulation of initiative, creativity, activity, pro-social and professional orientation, etc. The main task of education space is to ensure not only educational, but also full-fledged extracurricular activity of students. The need for harmonization of virtual culture by higher education students through creation of its new formats and forms of introduction actualizes promotion of development of innovative models of virtual interaction of future specialists and realization of their professional orientation in extracurricular activities.

In our opinion, under current crisis conditions for higher education in Ukraine, the limitations of the learning and upbringing environment can be minimized, which contributes to creative development of students. Participation of students as subjects of education process in development of a new quality of the institution's environment, application of the idea of remote education space, which at the same time ensures acquisition of competences, knowledge and skills of professional activity, and allows forming's personality as a creative leader in the field of future professional activity, is updated. Therefore, the mechanisms of involvement of acquirers in compatible social and creative activity in this space should be investigated.

The possibilities of contemporary education, mainly remote education, contribute to the perception of educational content and extracurricular activities as combined types of interaction that are integrated into a single whole, which creates a model for formation of a qualified specialist. This unity allows for implementation of education methods with a motivating effect and is perceived as

the constant participation of students and teachers in the same space with the use of remote communication tools. The combination of remote learning tools with additional extracurricular virtual activities of future social workers, in particular in social networks, makes it possible to implement an environmental approach. The latter has advantages over education in a mixed format, as it uses contemporary resources that are interesting to students, allows them to feel like creators of a new social cell in the online environment. The combination of teaching and education components, the possibility of operational communication, of dynamic interaction contributes to development of social creativity.

Let's consider the practical technology of social creativity development on the example of social workers training. According to the standard of higher education, formation of general and professional competencies of these specialists is expected, including the ability to generate new ideas (creativity), work in accordance with the international context, determination of strategic priorities, taking into account characteristic features of local, regional, national and global strategies of social dynamics. Therefore, development of social creativity as a higher manifestation of an individual's sociality should take place in order to achieve training of a competitive specialist capable of creative interaction, in particular at the local, national, and international levels. In order to ensure the specified results of education programs for training of social workers at HEI, not only educational, but also extracurricular socio-pedagogical centers (under conditions of danger – remote) should be created in order to improve the relevant professional and personal qualities of future professionals, and a creative approach to their social and professional self-realization should be stimulated.

For development of social creativity of future social workers, a technology based on the features of the socio-pedagogical approach (social development of an individual, involvement in social groups, improvement of education environment) was substantiated. During the substantiation of the technology, theoretical positions of the research are taken into account, in particular the essence of social creativity of student youth, the need to activate social interaction in order to develop its socio-professional, socio-civic, socio-informational components [5], characteristic features of the means of extracurricular activities are taken into account (art, media product, game, sport, etc.), and initiation of positive social changes in the environment of the institution of higher education and outside of it is ensured, particularly in the remote format. Integrated educational activities and the proposed technology were implemented at Sumy State University named after A. S. Makarenko among the graduates of the social work profession during the 2022-2024 academic years.

The aim of the technology is to increase the effectiveness of development of social creativity of specialists in contemporary society, taking into account challenges and threats. The activity was implemented on two levels: the internal environment of the institution of higher education and outside of it in the open social and virtual space. Below we present the most effective measures that

contributed to development of social creativity of future social workers. An operational plan of action was approved in the environment of the higher education institution by holding traditional meetings, as well as round tables and interactive dialogues using online interaction. During implementation of the technology at both levels (the environment of higher education institutions and the open socio-virtual space), information and communication activities were carried out to identify pro-social activity of professional and civic content.

At the stage of implementing the technology, the following procedures were implemented: selection of active groups of students to organize activities and involve other students; implementation of activities that contribute to development of social creativity; participation in the implementation of socio-creative programs and projects in the environment of the higher education institution; and operations: involvement of active groups of students; motivational actions of students regarding social-professional, social-civic, social-information components; involvement of teachers in improvement of disciplines; promotion of the values of the profession, activity of scientific and educational communities in the information and virtual environment; civic activism among students, in particular foreign students, to prevent alienation and discrimination; popularization of professional values; improvement of activities of student communities, in particular foreign students; activation of creative virtual communities) training "Fundamentals of the profession of the social worker" started a cycle of events of social and professional content, which had the task of realizing the social significance of the chosen profession by the applicants. This event took place at the SSPU named after A.S. Makarenko for three days and provided for participation of 30 people, repeated as necessary and at the request of new participants. A characteristic feature of its implementation was that representatives of different courses participated simultaneously, which strengthened healthy competition, self-organization and contributed to motivation to learn professional values with the aim of their further popularization in society. The general context of the training provided for mandatory involvement of teachers of professional disciplines in accordance with the educational programs of the applicants. For example, it was proposed for students to develop a consolidated program of educational work based on the center of territorial assistance for various vulnerable categories of the population. This made it possible to realize the subject position, contributed to development of professional values. Students of SSPU named after A. S. Makarenko (Department of Social Work and Management of Socio-Cultural Activities) offered to conduct social trainings "Social responsibility is our mission", to master the basics of crisis and strategic management of social projects. This forms creativity in creative education, civic creativity in social activities.

Development of social creativity of future social workers in extra-curricular and intracurricular processes became one of the fundamental tasks of the technology. This is necessary for development of creative attitude to the profession, acquiring the value of scientific and professional creativity. In accordance with the approved changes, interactive lectures on humanitarian disciplines and stimulation of educational activities in the teaching process took place. Students actively participated in independent training within the disciplines that offered innovations. Thus, the teachers noted the students' search for new informational literary sources from the offered lectures and participation in the technical support of education (multimedia, smart technologies, new media, etc.).

In order to activate the educational process through the integration of face-to-face and remote education, it was necessary to choose educational components that are used for experimental work within the limits of the technology's implementation. These disciplines became: philosophy, social work, cultural history of Ukraine, technologies of socio-pedagogical work, animation technologies in social work. During a meeting with teachers of these disciplines as part of the online broadcast of the "School of Pedagogical Excellence" on the topic "Contemporary education under conditions of challenges and threats", the need to apply innovations to the education process was explained. Leading experts were invited to conduct the class, who authoritatively delivered information and had experience in implementing innovative teaching methods in higher education.

For example, the discipline "Philosophy" was diversified with the topic "Human's worldview in times of global danger" through an interactive presentation with works of modern art, as well as with the topic of the lecture session "Social creativity of an individual in the works of contemporary philosophers" that took place in the form of an open online broadcast lecture with preliminary preparation of students for the discussion. This made it possible to form activity, creativity, responsibility in creative education, scientific, practical and professional activities, as well as to develop the value attitude to civic creativity.

Teachers of the academic discipline "Social work" proposed the topic "Transformation of social work in wartime conditions". The class took place by presenting the results of recent international social research in artistic images and brainstorming to determine the leading trends in the changes of social groups in contemporary society. Such forms of education activity allow stimulating the awareness of the value of professional creativity for mutual development of the individual and society, active interaction with various social subjects during civic activities, and initiating the use of information resources for creative professional and civic activity.

The discipline "History of the culture of Ukraine" was diversified by the topics "Historical figures in the contemporary culture of Ukraine", "My independence: from the sources to the contemporary Ukrainian reality". Means of activating activity were used during the educational campaign "See the invisible" with the use of music and artistic works, as well as independent research and presentation of unknown facts about figures of Ukrainian culture in the history of the country. This affects the value attitude towards civic life, active self-organization of creative educational,

scientific and professional activities, actualizes the means of new media in revealing responsibility for the search, use and creation of new information of professional and civic content.

From the discipline "Technologies of social and pedagogical work" the topic "Reintegration as a trend of the post-war era" was chosen. There was a binary lecture with elements of discussion, a personal mini-study by students with the presentation of results using new media at the conference. This forms the socio-civic component of social creativity of future social workers, develops creative and responsible civic activity.

The teachers of the educational course "Animation technologies in social work" offered to implement a flash mob in an educational institution with an art presentation of beauty in contemporary life and a heuristic class in an interactive classroom on the topics "Animation as a response to the crisis phenomena of our time", "Virtual history of the animation idea" with online access. It develops creativity in an information-virtual environment of professional and civic content.

In order to draw attention to the technology for development of social creativity and make students interested, open lectures were held among students in an interactive form (for example, on the topic "Student in a virtual space"), philosophical walks with mentors (in particular, on the topic "History and modernity of university education"), these events being announced and popularized in advance in the higher education institution.

Traditionally, the "Initiation into the profession" event takes place at the HEI, but recently it has acquired a rather necessary character. Therefore, the task of its organization was to actively initiate updated forms of this event by the students themselves. It was proposed to hold the "Festival of Professions" simultaneously for various specialties. Art tools were used, as well as methods of quests, flash mobs, and street actions were selected. The search quest proposed by the future social workers was aimed at finding treasures, which took the form of professional values and skills. In general, the participants of the experimental groups actively participated in this area of activity, as it met the needs of professional identification and popularization of the values of the profession among students.

As part of the implementation of the technology, media support (media product, Internet content) was used in the remote education space. Aside from socio-professional and socio-civic components of social creativity, it had a special impact on the socio-informational component, particularly the value attitude to professional and civic creativity in the information-virtual environment, along with initiative and criticality in obtaining information, was developed. For example, professionally oriented virtual tourism was carried out with the help of media and Internet technologies. A search for sites that were related to a certain profession, pages, posts that illustrated professional values took place. Students summarized these data and demonstrated them to freshmen in order to establish confidence in their professional choice.

In extracurricular activities, socially oriented programs were developed and implemented, in particular, students proposed a cycle of events called "There is no someone else's trouble", which was aimed at integration of students with developmental issues or difficult life circumstances. Students showed concern and an active pro-social attitude towards their peers.

In the future, these programs continued in energizing civic-oriented creative actions, in which students of the SSPU named after A.S. Makarenko developed motivating forum-theatre plots (for example, "Are you a citizen, or...?" aimed at drawing attention to the issues of different age groups of the population, "Who is your advisor?" is intended to highlight the issues of internally displaced persons), which were broadcast online for students of other specialties. This contributed to development of civic activity in strengthening social ties, responsibility for transformation of social space.

The direction of civic and social actions was summed up during the presentation of the students' own initiatives. Several mobile teams were formed, which collected initiative proposals of students, summarized them, and promoted further popularization among other representatives of student youth. Volunteers underwent express training with the participation of specialists from the public organization "Social Universe" in the form of "Volunteer as a leader of social life" training. During this work, a compatible collage of joint actions was created, and at the end, the "Social Creativity" quest was held.

One of the directions of activity was presentation of one's own socially positive projects in social networks. The project activities of the students involved achievement of specific social changes with the use of clearly defined resources. What was special was that the students' projects were not only related to student life, they principally extended to other social groups, which made it possible to reveal a civic and social position. In particular, the project of interaction with the elderly involved organization of leisure activities for the elderly. The "Older Generation" program was held at the university, which provided for involvement of the older generation in sharing experiences. During this event, students involved people of the golden age in learning new technologies, and received advice from each other. Then, by mutual agreement, the results of this communication were posted in the virtual space with appropriate comments.

Scientific picnics at universities are a form of extracurricular activity aimed at attracting the attention of future applicants to the choice of a profession. That is, during these events, students become real subjects of promoting the values of the profession, which strengthens the socio-professional component of social creativity. Vocational orientation of high school students continued when they were invited to participate in the "Profession Holidays" held at HEI. Future entrants were involved in learning the basics of the profession using available methods. Students presented their profession as they see it with a certain amount of humor. These were quizzes and competition

programs. For example: "Journey to social work" took place in the form of traveling through the profession of a social worker.

At the initiative of students, "Patriotic flash mobs" took place in the squares of higher education institutions, squares, parks, etc. under the condition of complete security. These vigorous actions had supporters, people joined in the streets. This activity ensures students' participation in creative civic activities in the social environment.

Events "Volunteer as a leader" became the result of students' social activity, as even those representatives of the student body who expressed skepticism about participation joined. The offer to become an inspiration and a social leader for various social groups turned out to be interesting and allowed the not-so-active young people to join in creative interaction. For this, those students who have already shown themselves to be active participants in the implementation of the technology undertook to additionally motivate and promote the activation of other students. For example, the mobile volunteer group of SSPU named after A. S. Makarenko conducted a modified class using the "equal-to-equal" method called "What can you do, what can't I?!". This activity was aimed at a certain provocation and turned out to be effective for promotion of initiative. In particular, in the future, students expressed a desire to accompany the activities of volunteers with positive comments in the virtual space, among them were those who developed social advertising of the students' activities. The final conference of the participants made it possible to share opinions, identify the shortcomings of the activity and its prospects. The students who took part in it made a joint decision to continue the work and spread it outside the education space of the higher educational institution. The final methodological seminars were aimed at improving the further implementation of the technology. In particular, the topic "Interactive methods of interaction in the student environment" aroused lively interest.

Conclusions

As a result of the research, the issue of development of social creativity of future social workers was analyzed. It has been proven that the characteristic feature of development of social creativity of future social workers is active orientation of students of said profession towards mastering professional (traditional and innovative) experience of the world for socially significant transformation of contemporary culture (mental and material; real and virtual) through professional and social activity. The specificity is determined by the need for their further professional participation in the processes of socio-professional interaction. Therefore, in the process of professional training, an institution of higher education should contribute to formation of professional subjectivity as the basis of social creativity, which should be provided by a remote educational space of higher education institutions. A socio-pedagogical technology for development of social culture of student youth was developed and implemented, which took place according to the stages of the

technology (preparatory, implementation, final) and in accordance with the set goal, tasks, and directions, taking into account the specifics of the means of the applied activity. Among the leading ones, the most influential and activating are: art, Internet content, media product, tourism, civic initiatives, volunteer projects. The most effective were interactive forms of exchange and creative activities, during which various types of art and media products were used. Thus, there was an activation of the remote education space with the direct participation of student youth and identification of social creativity of the students. Prospects for further research are development of the concept of remote education space with the aim of developing social creativity of students of various specialties, use of the latest means of information and virtual environment for active participation of students in the cultural processes for the reconstruction of post-war Ukraine.

REFERENCE

- 1. Hnatiuk O. V. Characteristic features of remote learning of participants in the educational process under martial law. URL: https://lib.iitta.gov.ua/732434/1/Текст.pdf.
- 2. Derevian L.Y. Creativity of a social pedagogue as a structural component of professional training at HEI Issues of Modern Psychology. 2009. Issue 4 Collection of scientific works of Ivan Ohienko K-PNU, Institute of Psychology named after H.S. Kostiuk APN of Ukraine. P.86-97.
- 3. Kolotylo M. O. The philosophy of creativity in the professional activity of a social worker. Collection of scientific papers "Gilea: scientific bulletin" vol. 151 p. 74-78.
- 4. Kramarenko I. S., Kornisheva T. L., Silyutina I. O. Adaptation of remote education in higher education to the conditions of martial law. Perspectives and innovations of science. (Series: Pedagogy; Psychology, Medicine). 2022. Issue 4. P. 192–205.
- 5. Maksymovskyi M. Structure and contents of student youths' social culture: social pedagogical aspect / M. Maksymovskyi // Norwegian Jornal of development of the International science. No. 2. 2017, p. 55–59.
- 6. Maksymovska N. O. Socio-pedagogical activity with student youth in the field of recreation: animation approach: monograph. Kharkiv: Tim Publishing Group, 2015. 366 p.
- 7. Nikonenko Y.V. The concept of creative potential of a social worker Current issues of psychology. Volume 7, issue 31, pp. 171-180.
- 8. Petryshyn L.Y. The substantive aspect of the formation of creativity of future social pedagogues as a guarantee of the effectiveness of their professional activity. Scientific Bulletin of the Uzhhorod National University. Series "Pedagogy. Social work". Issue 30, pp. 127-131.
- 9. Ryzhanova A.O. Socio-pedagogical activities with youth with special needs in war and post-war times. Current issues in modern science ("Pedagogy" Series). 2023. No. 9 (15). P.816-826.
 - 10. Shedyakov V. Social creativity and innovativeness of strategic management. Political Management No. 1-2, 2013 p.42-51.

FUTURE PRESCHOOL EDUCATION TEACHERS' MOTIVATION AND ORIENTATION TOWARDS WORK WITH CHILDREN WITH SPEECH AND LANGUAGE DISORDERS

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Annotation. Article is devoted to the problem of professional motivation and orientation of future preschool education teachers towards work with children who have speech and language disorders. On the basis of theoretical analysis, the motivational complexes and types of professional orientation that are optimal for the future educators' work with preschool children with speech and language disorders have been clarified. The conducted empirical study made it possible to identify future preschool teachers' motives, motivational complexes as well as their professional orientation types and subtypes towards work with children who have speech and language disorders. It was statistically confirmed the interconnection between the future preschool teachers' type of professional orientation and the motivation towards work with children with speech and language disorders.

Keywords: motives for professional activities, motivation for professional activities, professional pedagogical orientation, future preschool educational teachers, children with speech and language disorders, professional competence "ability to work with children with speech and language disorders."

Introduction

The preschool teacher training system is aimed at the forming and preparing a competent specialist who is able to develop, educate, teach and take care of children from an early age (mostly 2-3 years) until they enter school. The period of preschool childhood is crucial for overall child development and for the development of preschoolers' speech in particular. Therefore, the role and value of the preschool educators and their influence cannot be underestimated.

In the process of preschool teacher training, it is very important to form both general and professional competencies. One of them, in our opinion, is the ability to work with children who have speech and language disorders. We explain this by the fact that in early and preschool childhood, the speech function is only being formed and developed, and it is the teacher who can notice the lag in

its development in time. Due to this she/he is able, within the framework of his professional functions, to provide appropriate assistance in preventing the progress of speech and language disorders or carry out appropriate corrective and developmental measures to correct and improve the child's speech. In addition, in cases of severe speech disorders (such as alalia, dysarthria, stuttering, etc.), a preschool teacher often becomes a member of the team providing psychological and pedagogical support to child with special educational (functional speech, according to the Methodological Recommendations for Determining Early and Preschool Age Children 's Educational Difficulties and Levels for Support (Prokhorenko, 2022) needs and complements the influence of a speech therapist. Moreover, spending between 5 to 10 hours a day with a preschool child or a group of preschool children with speech and language disorders, a teacher can integrate corrective tasks for the development of speech breathing, articulation, stimulation and automation of sounds, words, word combinations, sentences in seemingly non-speech activities – such as play, cognitive, creative, labour, physical fitness and health, drawing and modelling activities, etc. On this basis, we consider it necessary to form future preschool teachers' professional competence "the ability to work with children with speech and language disorders" even at the stage of obtaining a bachelor's degree.

Motivational sphere of a specialist (needs, motives, aspirations, inclinations, ideals, beliefs, worldview) plays an important role in his formation and development. Motivation for professional activity occupies a leading place in the structure of the future specialist's educational activity and is one of the key concepts for explaining motives as driving forces for acquiring a certain profession. After all, an insufficient level of motivation for the future profession negatively affects the students' activity in the educational process and their success in further professional activities. Hence, it is important to diagnose and, based on the obtained results, form the motivation and professional orientation of future preschool teachers towards work with preschool children, including those who have speech and language disorders.

Purpose, tasks and methods of the research.

The purpose of the research is to study theoretically and empirically the future preschool teachers' motivation and orientation towards work with children with speech and language disorders. For its realization, it necessary to solve the following research tasks: 1) to analyse studies on the problem of professional motivation and orientation in general, and their place in the professional development of future preschool teachers able to work with children with speech and language disorders; 2) based on theoretical analysis, to find out the motivational complexes and types of professional orientation that are optimal for the future teachers' work with preschool children with speech and language disorders; 3) to determine empirically future preschool teachers' motives, motivation and orientation towards work with children with speech and language disorders; 4) to

establish statistically the existence of a correlation between future preschool teachers' orientation and motivation to work with children with speech and language disorders.

The study involved 760 students majoring in "Preschool Education" who were studying in the 1st–4th years at higher education institutions in Ukraine. During the research, we used theoretical (analysis of scientific literature, quantitative and qualitative analysis of the obtained experimental data, synthesis, comparison, generalization) and empirical (author's questionnaire for identifying future preschool teachers' professional motives, needs, interests, attitudes and self-esteem regarding working with children with speech and language disorders; "Motivation of professional activity" K. Zamfir's method modified by A. Rean; a questionnaire for determining the type of future preschool educator's personality orientation, developed on the basis of T. Danilova's modified questionnaire of practical psychologist's type of personality orientation) methods, as well as methods of mathematical statistics (determination Pearson's correlation coefficient).

Analysis of research on the problems of professional motivation and orientation

The problem of professional orientation, motivation and motives of activity is one of the leading issues in psychological and pedagogical research focused on professional training of specialists in various fields. It has been studied by Maslow (1943), Herzberg, Mausner & Snyderman (1959), Zamfir (1983), Deci & Flaste (1996), Bespalko (2000), A. Kuzminskyi (2005), Heckhausen & Heckhausen (2010), Hagger & Hamilton (2020).

In pedagogical and psychological research, the problem of motivation for activity, including professional activity, is considered from the perspective of studying the concepts of "motive", "motivation" and "orientation".

According to dictionaries and reference sources, "motive" is considered as: an incentive to activity, associated with satisfying the needs of the subject; a set of external or internal conditions that cause the activity of the subject and determine its direction (motivation); a material or ideal object that stimulates and determines the choice of activity direction, for which it is carried out; a conscious reason that underlies the choice of actions and deeds of the individual (Shapar, 2007, p. 264). Also, according to Honcharenko (1997, p. 217), the same activity can be carried out on the basis of different motives.

The set of motives, their diverse combination in the process of motivating an individual to perform his/her activity and achieve its result constitutes motivation.

The term "motivation" is considered as an internal conscious or unconscious motivating reason for the actions and deeds of a person; as a system of interrelated motives of activity that determine its direction and line of behaviour of a person (Shapar, 2007, p. 264-265); a set of stable motives, incentives that determine the content, direction and nature of a person's activity, his/her behaviour (Pobirchenko, (2007), p. 172).

Bespalko (2000) understands motivation as "a person's genetic desire for self-realization in accordance with his innate abilities for certain types of activity and persistence in mastering them at a creative level" (Bespalko, 2000, p. 16). In his opinion, such an active and persistent desire is embodied in real achievements only when the necessary conditions arise or are specially created for this. In the opposite case, Bespalko (2000) argues, unmotivated types of activity, in which achievements do not exceed the level of the performer, suppress the self-realization of the individual to a certain extent.

The superstructure and hierarchically higher formation that combines individual's set of motives, as well as the goals, needs, interests, values, ideals, beliefs and attitudes, based on his/her motivation, is orientation. According to Shapar's dictionary, orientation is a stable dominant system of motives, interests, beliefs, ideals, tastes, etc., in which human needs manifest themselves (Shapar, 2007, p. 307). A similar definition is found in Pobirchenko's dictionary: "a set of emotional and value attitudes that create a hierarchical structure of dominant, conscious needs, motives and impulses of the individual and determine the main directions of his/her behaviour and activity" (Pobirchenko, 2007, p. 294). Being an integral characteristic of the personality, orientation combines: 1) orientation towards oneself, which is associated with the need for self-expression, self-realization and self-improvement in the sphere of activity and behaviour; 2) orientation towards other people, which is associated with interest in them, trust, respect, desire for cooperation; 3) orientation towards the objective side of the profession or the content of professional activity. Orientation is manifested in the worldview of the personality, its spiritual needs and practical actions.

The driving factor in the development of a person's professionalism is his/her professional motivation. According to Maslow's hierarchical theory of motivation, A. Sotnikova (2010) defines professional motivation as a set of needs and interests that encourage a person to professional activity, professional self-realization and professional improvement.

According to Erokhin, Nikitin, & Nikitina (2011), professional motivation can combine three main complexes: interest, duty, and self-assessment of professional suitability (Yerokhin, Nikitin, & Nikitina, 2011, p. 22). Professional interest in the structure of motivation can be direct and indirect.

Direct interest in a specific professional activity arises on the basis of the attractiveness of its content and processes. It includes: 1) professional-specific interest – interest in objects, processes of labour the that characterize its main functions, as well as in the results that are expressed in the created products, provided services, etc.; 2) general professional interest, which arises on the basis of the attractiveness of the most general properties of the profession; 3) romantic interest, which is based on the idea of the unusualness of profession; 4) situational interest, which is formed on the basis of random, atypical features of profession.

Indirect interest is determined by certain organizational, social and other characteristics of the profession. This type of interest combines: 1) professional-cognitive interest, which is based on the desire to learn certain natural, technical, humanitarian and other processes and phenomena; 2) interest in self-education, which is manifested in the desire for spiritual enrichment and the formation of subjective and value qualities of the individual; 3) prestigious interest, which determines the choice of a profession, based on the prospects for professional growth and the prestige of the profession in society; 4) interest in related opportunities reflects the desire of a young person to satisfy certain spiritual and life and everyday needs and demands, such as the desire to communicate with people, the need for material security, etc., through the chosen profession; 5) indefinite interest, which is based on an indefinite emotional attraction to a certain profession.

Regarding duty, the motive of social duty in choosing a profession is the individual's awareness of the real social benefit from his/her participation in this field of activity, the experience of personal responsibility for successful work, and the readiness to overcome possible moral and physical difficulties. Liashenko (2013) identifies four main groups of duty motives: responsibility towards everyday professional duties and requirements; the desire to improve skills in the chosen field; innovation in work and organization; general altruistic aspirations.

An important component of motivation for choosing a particular profession, and subsequently, a stimulus to remain in it, is also an individual's self-assessment of his/her professional suitability. A student choosing a certain profession must evaluate not only his necessary knowledge and skills but also the level of development of personal qualities, mental cognitive and volitional processes required by the profession. If we are talking about a specialist engaged in a certain professional activity, his feeling of self-realization in the profession and analysis of the compliance of his competence level with the activity requirements allow him to assess his level of professional suitability and identify the gaps that need to be filled with the appropriate knowledge and skills or to be updated through professional self-improvement.

F. Herzberg et al. (1959, 1966) developed a two-factor theory that contains a meaningful description of the most typical professional activity motives. According to this theory, all motives are divided into two groups by their orientation. The first group of motives ("motivator factors") is aimed at solving production tasks. These include the possibility of work achievements, opportunities of professional growth, acknowledgment and work meaningfulness, the possibility to increase professional competence level, a high degree of responsibility, complexity, variety, interesting content of the work. The second group of motives ("hygiene factors") makes the work more attractive, but to a much lesser extent contributes to increasing the productivity of professional activity. These include workplace comfort, salary, minimum tension and stress, relationships with colleagues and managers, flexible work schedules. They provide "healthy" occupational conditions and reduce

unsatisfaction, but they don't result in the growth of satisfaction and productivity of work and are insufficient to create high motivation level.

The research devoted to the problem of motivation as such, and motivation for professional activity in particular (Herzberg, Mausner & Snyderman, 1959; Zamfir, 1983; Deci & Flaste, 1996; Ryan & Deci, 2000; Heckhausen & Heckhausen, 2010), distinguish two types of it – intrinsic and extrinsic.

Intrinsic motivation consists of needs, desires, and wants, which encourage a person to look for ways to solve a certain problem, thereby contributing to his/her greater independence and initiative in actions.

According to Deci & Flaste, intrinsic motivation is at the heart of "healthy behaviour and lasting change" (Deci & Flaste, 1996, p. 9).

Ryan & Deci (2000) consider intrinsic motivation as the main source of satisfaction and support for the sustainability of any activity. In their opinion, intrinsically motivated behaviour is almost spiritual and associated with a sense of achieving a goal. Also, they add that intrinsic motivation "is vitality, dedication, transcendence. It is one of those experiences that can be called 'more' than ordinary moments" (Ryan & Deci, 2000).

According to Heckhausen & Heckhausen (2010) truly intrinsic motives for work are the desire for self-development and interest in learning new things. At the same time, in their opinion, motivation to improve professional level, communication, receiving praise are natural and important incentives in professional activity, but they cannot be considered as completely intrinsic motivations. In addition, scholars distinguish extrinsic motives – economic reward, the desire to be important and needed (notable), the desire for prestige and success.

Zamfir (1983) has a similar position regards the division of motives. The researcher believes that if the activity is subjectively significant for the individual, he/she receives pleasure both from the process itself and the result of the work, considers it as an opportunity for the most complete self-realization in certain area, then this indicates the internal motivation for the profession; external motivation is manifested in the fact that the specialist is more focused on satisfying needs that are not related to his/her activities (prestige, high salary, avoidance of punishment, etc.). In addition, Zamfir distinguishes external positive (money earnings, desire for career growth, the need to achieve social prestige and respect from others) and external negative (desire to avoid criticism from the manager or colleagues, possible punishments or troubles) motives in external motivation.

A. Rean (1999) has refined and modified the methodology for assessing professional motivation proposed by Zamfir. The researcher considers the following two types of combinations of motivational complexes to be the best and optimal: IM > EPM > ENW and IM = EPM > ENM (where IM – internal motivation, EPM – external positive motivation, ENM – external negative motivation);

the worst motivational complex is the type ENM > EPM > IM. Between these complexes, Rean notes, there are intermediate (according to their effectiveness) motivational complexes; therefore, in the process of interpreting the obtained experimental data, it is advisable to take into account not only the type of motivational complex, but also how much one type of motivation surpasses the other in terms of manifestation degree. According to the researcher, satisfaction with the profession has a significant correlation with the optimality of the motivational complex of the individual (positive significant relationship, r = +0.409). In other words, the satisfaction of the individual with the chosen profession is the higher, the more optimal his motivational complex is: the high level of internal and external positive motivation and the low level of external negative motivation. In addition, Rean found out a negative correlation between the optimality of the motivational complex and the level of emotional instability of the personality (significant relationship, r = -0.585). Thus, the more optimal the motivational complex, the more an individual is motivated by the content of the activity itself and the aspiration to achieve certain positive results in it, the lower his emotional instability. Conversely, the more an individual's activity is driven by motives of avoiding criticism and the desire "not to get into trouble" (which start to overshadow motives related to the value of the activity itself, as well as external positive motivation), the higher the level of emotional instability.

Bergmark, Lundström, Manderstedt & Palo (2018) have an interesting position regarding the classification of motives for choosing a teaching profession. In particular, the researchers identify altruistic motives, which are quite close, but not identical to the group of intrinsic motives. According to Bergmark et al. altruistic motives cause students to perceive teaching as a valuable and important profession and form their desire to support children's development and make certain changes in society by means of their profession. Like other scholars, Bergmark, Lundström, Manderstedt & Palo (2018) consider that external motivation (in their interpretation extrinsic motivation) is caused by outside stimulation of receiving a reward or avoiding punishment, for example, earning money, gaining a high position in society or material benefit. Such external factors act as intentions for a person to perform a certain task or achieve a certain goal.

Thus, it can be argued that the analysed views of researchers on the problem of motivation for professional activity mostly correlate with the Herzberg's (1966) two-factor theory, according to which hygiene factors are considered as external motives, and intentions related to interest, obtaining non-material satisfaction and self-realization in the profession – as internal.

To master the profession of a preschool teacher, it is important to form such students' professional motivation for pedagogical activity, which would combine internal incentives that drive their activity and determine the direction of the future teachers' work. It is especially important to form it at the stages of professional self-determination and training of future specialists. After all, being an awareness of the individual's current needs (obtaining higher education, self-development,

self-knowledge, professional development, raising social status), professional motivation, in the opinion of Pavlova (2015) and Pinska (2009), is satisfied by completing educational tasks, and encourages the student to study future professional activities.

Pinska (2009) considers professional motivation as a characteristic of personality, which combines a system of goals, needs that encourage the student to acquire knowledge actively, master skills and abilities, and conscious attitude to the profession. According to the researcher, professional motivation plays the role of a compensatory factor: a student with insufficiently developed abilities, but with professional motivation, can achieve greater success than a capable student who lacks professional motivation. A similar opinion, but already regards a professional, is stated by Zaniuk: "success in any activity depends not only on abilities and knowledge, but also on motivation. The higher the level of motivation, the more motives encourage a person to activity, the more efforts he will make. This explains the fact that a person with a high level of motivation works hard and achieves better results" (Zaniuk, 2002, p. 9). Therefore, the purposeful forming students' professional motivation is one of the primary tasks of higher education.

Kuzminskyi (2005) notes that in pedagogical studies, motives are classified into groups, namely: social (the desire of an individual to confirm his social status in society through learning), motivational (associated with the influence of certain factors on the students' consciousness – parents' requirements, advice, examples of teachers, etc.), cognitive (manifested in the awakening of cognitive interests and realized through receiving pleasure from the process of cognition itself and its results), professional and value (reflect the students' desire to receive thorough professional training for effective activities in different spheres of life), mercantile (caused by the direct material benefit of the individual) (Kuzminskyi, 2005, p. 183).

Pavlova (2015) defines cognitive, professional and personal groups of motives in the motivation for professional and pedagogical activities. Thus, the cognitive group is represented by motives and aspirations that characterize the orientation towards mastering the content of disciplines and acquiring methods of action (educational and cognitive motives, cognitive interests in professional knowledge, orientation to the result of educational work); the professional group covers educational and professional motives, interests, professional and value orientations and attitude to the future profession, which are determined by the content and structure of the activity itself (the desire to acquire professional competencies, master the profession and become a good specialist, awareness of the significance of the teacher's activity); the personal group includes motives related to the focus on the significance of educational actions, personal well-being, the need for professional growth (the desire to master the methods of independent acquisition of professional knowledge, the desire for self-development, self-education, professional intentions, the desire for self-realization, self-expression in a professional and pedagogical environment.

Studies conducted by different researchers demonstrate the diversity of students' motives for choosing a preschool teacher profession. According to Sinclair (2008), the most common motives are associated with students' positive self-evaluation of their attributes and capabilities to be teachers, desire to work with children and because of the intellectual stimulation teaching would provide. At the same time, Roness & Smith (2010) found that students are motivated to choose the profession of a preschool teacher because it gives multiple options in the job market. Despite the diversity of future preschool teachers' motivation for professional activity, Tekin (2016) claims that participants had higher intrinsic motivations than extrinsic motivations for teaching.

To a large extent, the predominance of students' internal incentives to become preschool teachers is due to their orientation, which, in addition to motives, also includes the needs, aspirations, interests, attitudes, beliefs, values, and ideals of the individual and is embodied in their attitude towards reality and themselves. In other words, it is a kind of vector of a person's orientation, depending on what he/she prioritize in his/her worldview and which values he/she considers paramount. Since the profession of a preschool teacher lies in the field of "person-to-person" professions and is related to the development, upbringing, and education of the youngest members of our society – children of early and preschool age – it is important for educator to have formed humanistic and pedagogical orientation and to develop it in the process of acquiring the profession and further independent professional activity.

Zahorodnia & Titarenko (2010), Ziaziun (2004) consider the humanistic orientation of the teacher to be the leading characteristic and system-forming factor of his professional skill. According to Dobryden (2011) humanistic orientation is an indicator of a high level of pedagogical culture formation.

A. Kudusova (2005) considers this concept as a set of individual's invariant stimuli and methods of activity, which correspond to his/her values and ideals, and act regardless of the conditions and situations in which he/she is (Kudusova, 2005, p. 11). In this regard, the researcher provides a detailed description of the essence of the teacher's humanistic orientation: it integrates a person's knowledge and ideas about goodness, truth, justice, the unconditional value of other people, the moral norms of society and community. Based on them, the teacher's emotional and value sphere is formed, and represented in particular by the motives of altruism, empathy and compassion (empathy), social responsibility for his/her actions, which determine behaviour and activities in situations of moral choice through comparing them with the highest universal human values and ideals.

Taking into account the humanistic traditions and modern trends in the development of Ukrainian and European pedagogy, we can conclude that the preschool teacher's humanistic orientation is embodied in the attitude towards the child as the highest value, respect for his/her dignity, recognition of the right to freedom, free expression and development of potential abilities,

regardless of the peculiarities of ontogenesis. At the same time, the humanistic orientation is the basis for the development of the teacher's professional orientation, which is a decisive factor in choosing his/her profession even at the stage of professional self-determination, as well as an indicator of the attitude towards work in general and the quality of activity, in particular, of a specialist, who is already working in the education system.

Litovka (2014) considers professional orientation as a set of dominant motives for choosing a career and professional activity and educational motives, as well as a system of value-based attitudes of an individual towards the profession and towards himself/herself as a professional, interests, needs, inclinations, aspirations related to professional activity. For professionals in the educational field, in particular preschool teachers, this is pedagogical orientation, which reveals itself in a positive attitude towards the pedagogical profession, interest in pedagogical activity, a feeling of the need to improve and realize oneself in it. Serhieienkova, Stoliarchuk, Kokhanova & Paseka (2012) define the concept of teacher's pedagogical (professional) orientation in such way: "it is an interest in pedagogical activity and an ability to do it; emotional attitude towards activity (love, pleasure and other needs)" (Serhieienkova, Stoliarchuk, Kokhanova & Paseka, 2012, p. 142). According to researchers, it determines the teacher's activity in professional activities, his desire to use different, in particular modern, methods of working with the educational process participants and to implement his own developments and achievements.

Zahorodnia (2001) considers, that the pedagogical orientation of a preschool teacher is defined with the following principles: 1) attitude towards the child as a social value, awareness of the duty in the matter of upbringing to the pupils' parents and society; 2) orientation towards open and active partnership communication, built on a personality-oriented approach to the child; 3) social activity of the teacher; 4) constant striving for personal and professional self-improvement; 5) creative orientation – interest in pedagogical creativity, a desire for creative achievements, self-education of creative abilities; 6) orientation towards the comprehensive and harmonious development of pupils in accordance with the Basic Component of Preschool Education (Zahorodnia, 2001, p. 84).

Based on the principles described above, in our opinion, a teacher who is focused on working with preschool children with speech and language disorders is distinguished by the fact that:

- He/she recognizes the uniqueness of the child and cares about the development of its individual abilities, regardless of the level of cognitive functions and speech;
- He/she understands and realizes that each child is a unique personality, which can be revealed and developed in the process of interaction; therefore, the latter should be built taking into account the age and individual characteristics and needs of the pupils, in particular speech;

- He/she must communicate and coordinate his/her actions with those of colleagues members of the psychological and pedagogical support team, primarily the psychologist, speech therapist, musical teacher, physical education instructor, as well as with the students' parents;
- He/she must be able to publicize his/her professional activities in accessible ways through open days, social networks, mass media, volunteer activities, etc. thereby supporting his/her image as a teacher and the image of preschool education institution, which he/she represents;
- He/she must establish partnerships and, with the permission of the administration and the preschoolers' parents, involve specialists in the field of early development or early intervention who do not directly work in the preschool education institution but, if necessary, can provide additional educational services or qualified assistance to the children;
- He/she must be an agent of change to implement the educational process in the preschool education institution according to the trends in the development of education in Ukraine and the world.

Danilova (2004) suggests considering the psychologists' professional orientation from the position of two axes "humanism-egocentrism", "existentialism-pragmatism" and defines the dominant types of orientation – humanistic, existential, pragmatic, egocentric. In our opinion, they also can be used in the process of assessing the future preschool teachers' orientation towards working with children with speech and language disorders.

In particular, future educators capable of working with preschool children with speech and language disorders, who possess a humanistic professional orientation, are distinguished by the need to communicate with the pupils, develop them according to individual characteristics, timely diagnose delays in the preschoolers' speech ontogenesis, and find ways to overcome the identified disorders of speech development within the professional functions of a preschool education teacher. Students with this type of professional orientation love children, are friendly, empathetic, concerned about the problems of preschoolers' speech development, initiate providing them with speech therapy assistance, and are tolerant and delicate in their interactions with participants of the educational process, and patient regarding long-time corrective work to improve children's speech.

The pragmatic professional orientation type of future preschool teachers capable of working with children with speech and language disorders is characterized by the dominance of the motive to achieve success in professional activity, to be recognized as a specialist, in particular, one who can provide adequate corrective assistance to children with problems in speech development. Students

with this type of professional orientation are purposeful, determined, they do not afraid to develop and implement plans for correctional and developmental work with children with speech and language disorders and if it is necessary make changes to them, and non-standard decisions in order to achieve the set correctional-educational and correctional-developmental goals.

Future preschool teachers capable of working with children with speech and language disorders, with an existential type of professional orientation, are characterized by a high level of introspection, reflection, a desire for constant self-improvement in the field of preschool education, speech therapy and speech pedagogy through the formal and non-formal and informal education, self-development and actualization of acquired knowledge and skills in practical activities during interaction with preschool children. They are able to pedagogical observation, analysis of pedagogical phenomena and pedagogical and predictive activities, as well as self-demanding.

Future preschool teachers with an egocentric type of professional orientation are characterized by selfishness, giving priority to their own personal needs and interests over professional ones and the needs and interests of educational process participants, in particular children with speech and language disorders. They consider working with preschoolers mostly as a means of self-affirmation and self-realization, and solving correctional-developmental and correctional-educational tasks, participating in the psychological and pedagogical support team – as a means to declare oneself as a specialist and create one's own professional image.

There is almost no "pure" type of professional orientation, so the aforementioned variants can be combined in different ways and changed during teachers' professional training and self-improvement. In our opinion, the most optimal types of professional orientation for future preschool educators working with children with speech and language disorders, besides the humanistic type, are its combinations with the pragmatic or existential types. Less optimal, but such that make it possible to diagnose and correct disorders of preschoolers' speech development within the professional functions of a preschool teacher, are also pragmatic and existential types of students' professional orientation in various combinations.

Thus, the students' motivation for choosing a preschool teacher career is largely determined by their orientation, in particular their professional orientation. At the same time, the motives for choosing professional activity and the future teacher's type of professional orientation can be formed, developed or adjusted in the process of studying at a higher education institution during learning professionally oriented disciplines, and during educational practices in kindergartens.

An empirical study for determining the future preschool teachers' motives, motivation, and orientation towards working with children with speech and language disorders

We conducted research in order to study the students' motivation to choose a preschool teacher profession, as well as the motives for working with children with speech and language

disorders within educator's professional functions and the type of professional orientation to it. 760 students of 1-4 years of studying at universities of Ukraine in the specialty 012 Preschool Education participated in it: 169 students from Oleksandr Dovzhenko Hlukhiv National Pedagogical University, 133 students from Ivan Franko Drohobych State Pedagogical University, 129 students from Yuriy Fedkovych Chernivtsi National University, 129 students from Uman State Pedagogical University named after Pavlo Tychyna, 105 students from Berdyansk State Pedagogical University (relocated to Zaporizhzhya), 94 students from National University "Chernihiv Collegium" named after Taras Shevchenko. As for the gender of the survey participants, the vast majority of them are female. Students who participated in the survey studied in regular (traditional), blended and distance learning formats. The distribution of participants in the experimental study by years and formats of study, as well as by gender, is presented in Tables 1, 2, 3.

Table 1. Distribution of respondents by years of study

Year of study	Number	Percentage
1st year	169	22,24
2nd year	153	20,13
3rd year	232	30,53
4th year	206	27,10
Total	760	100

Source: Own survey on the basis of conducted research

Table 2. Distribution of respondents by training format

Training format	Number	Percentage
Traditional (offline)	262	34,48
Blended	223	29,34
Distance (online)	275	36,18
Total	760	100

Source: Own survey on the basis of conducted research

Table 3. Distribution of respondents by gender

Sex	Number	Percentage
Female	722	95
Male	38	5
Total	760	100

Source: Own survey on the basis of conducted research

The tools used in the research included: the author's questionnaire to identify the professional motives, needs, interests of future educators and their attitudes and self- assessment regarding working with children with speech and language disorders, Zamfir's methodology modified by Rean "Motivation of professional activity"; a questionnaire to determine the type of orientation of the future

preschool educator's personality (a modified Danilova's questionnaire of the type of orientation of the practical psychologist's personality). An analysis of the obtained experimental data showed that such parameters as "learning format" and "gender" of the respondents did not cause significant differences in the responses of the students participating in the survey, therefore, they were not taken into account in the qualitative analysis of the research results. At the same time, the parameter "year of study" showed variability in the respondents' answers, and in our opinion, is significant not only for highlighting the quantitative results obtained in the experiment, but also for their description.

In order to clarify future preschool teachers' motives, needs, interests of and their attitudes and self-assessments regarding working with children with speech and language disorders, we used a questionnaire. The questionnaire questions and students' responses to them, as well as a quantitative and qualitative analysis of the obtained results, are presented below.

Answering the question "What motivated you to choose the profession of a preschool teacher?" students of all years of study mostly indicated the following motives: "love for children" (67.37% of respondents), "childhood dream of working with children and teaching them", "communication with children" (24.08%), "children's spontaneity, which motivates to work with toddlers and preschoolers" (5%). Additionally, besides the mentioned motives, future educators (12.24% of respondents) also indicated motives that showed external positive motivation for choosing the profession of a preschool educator – long vacations, continuous professional development, shift work. At the same time, 3.55% of respondents indicated that their choice of profession was influenced by external circumstances beyond their control – parents' wishes, advice from acquaintances, proximity of the university to their place of residence, the possibility of distance learning at the chosen higher education institution, and unexpected admission according to the chosen priority.

Answering the question "What are your professional needs as a future preschool teacher?" more than half of the respondents (56.18%) of all years of study indicated that they need to study and expand their knowledge of the theory, latest methods, and technologies of preschool education and speech therapy, as well as acquire skills in implementing various pedagogical techniques and technologies. 18.95% of students (mainly from the 2nd to 4th years of study) mentioned gaining pedagogical work experience as a preschool teacher, especially in inclusive or speech therapy groups, as their professional need. Almost the same number of respondents (18.68%) considered professional self-development to be a professional need; this need was mostly observed among students of the 3rd and 4th years of study, who had already experienced academic mobility in Ukrainian universities and non-formal and informal education through attending webinars and certificate courses. Pragmatic needs of future preschool teachers have been also identified – reducing the number of children in the group, grouping preschoolers by age for organizing work with them. Such answers were found in the

questionnaires of 2.10% of respondents, mainly from the 2nd year of study. Additionally, there were 4.09% of students, mostly from the junior years, who were unable to identify their professional needs.

The next question concerned how students assess their current level of interest in the professional activities of a preschool teacher. The majority of future teachers has rated it as sufficient (50% of respondents); a high level of interest has been recorded in 43.68% of students, and an average level in 6.32%; no low level of students' interest in the professional activity of a preschool teacher has been found. It is worth noting that a sufficient level of interest in the preschool teacher's activities was more observed among 1st and 2nd-year students, who had mastered only part of the mandatory professionally-oriented subjects and had little work experience with children, mostly gained during introductory or educational practices, or did not have it at all, since the practices were conducted in a distance format and involved only work with pedagogical documentation, not directly with preschoolers. The average and high levels of interest in the professional activity of a preschool educator were mainly observed among 3rd and 4th-year students. We associate such an indicator with the fact that these students have studied most of the mandatory and elective professionally-oriented subjects, has experience working with different categories of preschoolers gained during pedagogical practices in various formats, and more critically assess themselves as specialists, understanding both their strengths and weaknesses.

When determining their own professional interests, students indicated the following: forming a child's personality, its harmonious development, nurturing positive personality qualities, socialization and education, revealing children's talents, providing positive emotions to preschoolers (50% of respondents from all years of study), providing assistance to children with special educational needs, creating an inclusive environment in preschool education institution, where every child, regardless of its needs, could have the opportunity to develop and learn (19.21% of respondents, mainly from the 3rd and 4th years of study), applying acquired professional knowledge in practice working with children (11.58% of students, mainly from the 2nd and 3rd years of study), creative self-realization in the process of working with children, increasing the level of knowledge on methods of working with different categories of preschoolers, professional development (7.63% of respondents, mainly from the 3rd and 4th years of study), career growth (3.82% of respondents, mainly from the 3rd and 4th years of study). 5% of the students who participated in the study were unable to indicate their professional interests; most of them were students from the 1st and 2nd years of study.

The next two questions of the questionnaire concerned students' self-perception and self-assessment of their ability to work with children with speech and language disorders in different educational work organization conditions.

To the question "Would you be able to work in a preschool group attended by at least one child with speech and language disorders?" 93.68% of respondents answered affirmatively. Some students illustrated their answers with comments, here are a few of them: "I would adhere to an individual approach to each child, using various methods and means of communication to provide them with the opportunity to interact and learn effectively", "I would work in collaboration with other specialists, such as speech therapists or psychologists, to support the development of each child", "I am a quite empathetic and tolerant person, therefore, when interacting with children with speech and language disorders and families of preschoolers, I will be able to understand their feelings and needs, and on this basis create a supportive and open atmosphere in the group". The remaining respondents (6.32%, mainly students of the 2nd and 3rd years) noted that they would be able to work in such a group only if there is a speech therapist in the preschool institution. They explained their answers by stating that they needed more confidence in both their knowledge and skills in working with children who have different speech abilities.

There were fewer affirmative answers to the question "Would you be able to work in a special (speech therapy) group in a preschool education institution for children with speech and language disorders?" – 81.18% of respondents of different years of study answered "Yes": "I could, even without experience, but relying on the experience of colleagues with whom I would work in a speech therapy group", "I understand that it will not be easy at first, but then I will succeed", "I could work because I have some knowledge and skills in working with children with speech and language disorders. Additionally, I would closely cooperate with the speech therapist and the children's parents to correct the preschoolers' speech". 12.5% of students, mainly from the 2nd and 3rd years of study, stated that they were not sure if their professional knowledge and skills would be sufficient to work with a whole group of children with speech and language disorders. 6.32% of respondents, mostly from the 3rd year of study, answered "No" to the proposed question, since they had recently started studying speech therapy, the basics of special pedagogy and psychology, and theoretical aspects of inclusive education.

To the last question of the questionnaire "Would you like to work as a preschool teacher in a group for children with speech and language disorders?" all (100%) respondents answered affirmatively, although they noted that they previously had little or no experience working with such preschoolers. Here are some examples of future preschool teachers' explanations for their desire to work with children with speech and language disorders: "It is a somewhat unusual job, since more attention should be paid to the development of children's language and speech. But it would be interesting for me to work with each child to improve their speech", "This is an incredible and interesting experience that would allow me to implement my professional skills in working with children with different needs", "I would be a happy teacher if I managed to improve the speech of a

child with speech and language disorders", "It is important due to the increasing number of children with speech disorders. Working as a teacher in an inclusive or special group would allow me not only to be a competent specialist but also contribute to positive changes in children's lives", "Working with such a group, I will be able to influence the development of children, help them overcome speech difficulties and develop their potential capabilities".

From the results obtained during the survey, we can state that mostly future preschool teachers have been guided by internal motives in choosing their profession: for some, it is a childhood dream, others have a great love for children and desire to communicate with them. Students clearly have understood: to become a good specialist, it is necessary to have knowledge in the field of preschool education, and to be able to work in a preschool educational institution attended by children with different possibilities, particularly with speech and language disorders, it is also necessary to have knowledge in speech therapy. Therefore, the need to acquire such knowledge and transform it into practical skills and abilities, gain experience in working with preschoolers, including those with speech and language disorders, as well as constant improvement and professional development have been defined as their professional needs. The professional interests of the students also align with these needs, as they have believed that besides acquired skills and self-realization in the profession, it is very important to create an inclusive environment for each child according to its age and needs, to contribute to the formation of child's personality, and the development of each preschooler's potential capabilities. It has also been noted that there is a dependence between the years of study and the degree of formation of the specified elements of future preschool teachers' professional motivation. Thus, junior students (1st and 2nd years of study) have not fully understood the essence of professional needs and interests yet, but they have been generally motivated to work with preschool children, in particular with those with speech and language disorders. As for senior students (3rd and 4th years of study), they have already gained some experience in working with children and needed more knowledge, skills, and abilities to become specialists; at the same time, they have already been guided not only by internal motives, but also by external aspects and advantages of the teaching profession, such as longer vacations, short working day, and recognition as a universal specialist who can work with children with different speech abilities. All students have been aware of the need for early intervention in the development process of children with speech and language disorders and expressed a desire to become specialists who could facilitate both the general development of the child and, if necessary, help overcome preschoolers' speech and language disorders. Regarding the assessment of their own ability to work with children with speech and language disorders, over 90% of respondents answered affirmatively that they would be able to work in a group where there is at least one child with speech disorders, and 80% of respondents noted that they would be able to work with children, who attend speech therapy groups. The obtained results indicated high and sufficient levels of future preschool teachers' motivation to work with children with speech and language disorders.

At the same time, in order to exclude elements of "romanticization" in future preschool teachers' motivation to work with children with speech and language disorders, and to determine the ratio of internal and external motives, it has been used Zamfir's method in Rean's modification. It includes a questionnaire with 7 statements-motives for professional activity (monetary earnings; desire for career growth; desire to avoid criticism from the manager or colleagues; desire to avoid possible punishments or troubles; need to achieve social prestige and respect from others; satisfaction with the process and result of work; possibility of the most complete self-realization in this activity), which the respondent had to rate on a five-point scale according to the level of significance for him. The specialist's motivational complex is manifested in the ratio of internal, external positive and external negative motivation.

Table 4 represents the obtained results.

Table 4. Motivation of future preschool teachers' professional activity, in particular regarding work with children with speech and language disorders

Motivational complex	Number of respondents	% of respondents	Year of study	Number of respondents of the entire sample	% of respondents of the entire sample
IM>EPM>ENM*	332	43.68%	1	105	13.82%
			2	79	10.39%
			3	101	13.29%
			4	47	6.18%
IM>EPM=ENM*	48	6.32%	1	6	0.8%
			2	3	0.39%
			3	15	1.97%
			4	24	3.16%
IM>EPM <enm*< td=""><td>190</td><td>25%</td><td>1</td><td>13</td><td>1.71%</td></enm*<>	190	25%	1	13	1.71%
			2	43	5.66%
			3	58	7.63%
			4	76	10%
IM <epm>ENM*</epm>	48	6.32%	1	12	1.59%
			2	3	0.39%
			3	15	1.97%
			4	18	2.37%
IM <epm=enm*< td=""><td>47</td><td>6.18%</td><td>1</td><td>20</td><td>2.63%</td></epm=enm*<>	47	6.18%	1	20	2.63%
			2	5	0.66%
			3	14	1.84%
			4	8	1.05%
IM <epm<enm*< td=""><td>95</td><td>12.5%</td><td>1</td><td>13</td><td>1.71%</td></epm<enm*<>	95	12.5%	1	13	1.71%
			2	20	2.63%
			3	29	3.82%
			4	33	4.34%

* IM – intrinsic motivation, EPM – extrinsic positive motivation, ENM – extrinsic negative motivation

Source: Own survey on the basis of conducted research

Based on the data presented in the table, we can state that 43.68% of future preschool teachers has had the optimal motivational complex IM>EPM>ENM. The vast majority of respondents who revealed it are the 1st and 3rd years students; they have been convinced that by working with preschool children, including those with speech and language disorders, they would feel satisfaction both from the process and the results of the work, and would also be able to realize themselves as professionals. However, 12.5% of students, mostly from the 4th and 3rd years of study, have been found to have the least optimal type of professional motivation IM<EPM<ENM; it has manifested itself in the predominance of future preschool teachers' desire to avoid criticism from the manager or colleagues, as well as possible punishments or troubles.

The remaining future preschool teachers have had intermediate complexes of professional motivation: some of them have had the predominance of internal motives, while others – domination of external positive motives for choosing the profession of a preschool teacher and working with children with speech and language disorders. Thus, a quarter (25%) of respondents, mostly 4th-year students, have had a complex of motives in the ratio IM>EPM<ENM. In our opinion, this is due to the fact that these students are close to completing their studies, have studied both the theoretical aspects of working with preschool children and have completed almost all pedagogical practices. Therefore, they had both positive and negative experience of interaction with various participants in the educational process, which, at the time of the survey, manifested in the predominance of internal and external negative motivation over external positive. Similarly, we can explain the fact that 6.32% of respondents, mainly 4th-year students, had a motivational complex in which internal motives prevailed over an equal ratio of external positive and external negative motives (IM>EPM=ENM). At the same time, students with this type of motivational complex still have had the aspiration for career growth as a teacher of preschool education institution, as well as the need to achieve social prestige and respect from others, which could be satisfied, in particular, by their ability to work with preschool children who have speech and language disorders. The aforementioned motives, as well as the earning money motives, which according to the classifications described above are considered as external positive motives, are important for 6.32% and 6.18% of respondents, who have shown motivational complexes of the IM<EPM>ENM and IM<EPM=ENM types, respectively. It is noteworthy that the first complex of motives prevailed among senior students who have already understood the opportunity to use the teaching profession as a tool for creating their professional image as an preschool teacher capable of working with children with speech and language disorders, as well as for promoting themselves at the educational services market; the second complex of motives has been mainly found among students (mostly 1st-year students) who chose the teacher profession solely based on external circumstances.

The percentage ratio of students' motivational complexes within one year of study is illustrated in Figure 1.

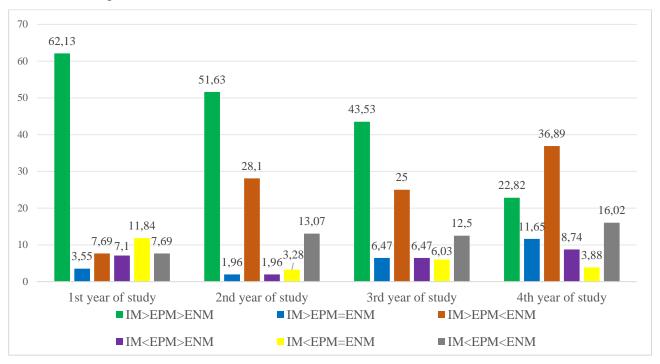


Figure 1. The correlation of 1st-4th-year students' motivational complexes regarding work with preschool children with speech and language disorders (in %)

Source: Own survey on the basis of conducted research

From Figure 1 it is obvious that students of all years of study mostly has had intrinsic motivation to working as a preschool teacher, in particular with children with speech and language disorders. Students of the 1st-3rd years of study has had the motivational complex IM>EPM>ENM, which is optimal. Approximately a third of respondents of the 2nd and 4th years of study and a quarter of the 3rd-year students has had the motivational complex IM>EPM<ENM. The least optimal complex IM<EPM<ENM has been found among 7.69% of the 1st-year students, among 13.07% of the 2nd-year students, among 12.5% of the 3rd-year students and among 16.02% of the 4th-year students, which in total amounted to approximately 1/9 of all respondents who participated in the study. Other motivational complexes have been recorded among a small percentage of respondents within one year of study.

Taking into account the correlation between motivation for professional activity and the type of professional orientation, we conducted a survey of students to establish the predominant type of their orientation towards working as a preschool teacher, in particular with children with speech and

language disorders. For this purpose, we used a questionnaire to determine the type of orientation of the future preschool teacher's personality (Danilova's modified questionnaire of the practical psychologist's personality orientation type), which contained statements related to life aspirations and different aspects of the respondents' lifestyle. The processing of the obtained results allowed us to define the leading types of future preschool teachers' professional orientation (humanistic, pragmatic, existential, egocentric), as well as their subtypes (Table 5).

Table 5. Leading types and subtypes of future preschool teachers' professional orientation regarding work with children with speech and language disorders

Type of orientation	Number and % of respondents	Subtype of orientation	Number and % of respondents	
Humanistic	163 (21.45%), of whom 1st-year students – 43 (5.66%)	Humanistic (distinct)	93	12,24
	2nd-year students – 36 (4.73%)	Humanistic = Pragmatic	28	3,68%
	3rd-year students – 42 (5.53%) 4th-year students – 42 (5.53%)	Humanistic = Existential	42	5,53%
Pragmatic	215 (28.29%), of whom 1st-year students – 35 (4.60%)	Pragmatic (distinct)	108	14,21 %
	2nd-year students – 42 (5.53%)	Pragmatic > Humanistic	40	5,26%
	3rd-year students – 64 (8.42%) 4th-year students – 74 (9.74%)	Pragmatic > Existential	67	8,82%
Existential	256 (33.68%), of whom 1st-year students – 43 (5.66%)	Existential (distinct)	146	19,21 %
	2nd-year students – 39 (5.13%)	Existential > Humanistic	42	5,53%
	3rd-year students – 105 (13.81%)	Existential > Pragmatic	41	5,39%
	4th-year students – 69 (9.08%)	Existential > Egocentric	27	3,55%
Egocentric	126 (16.58%), of whom	Egocentric (distinct)	78	10,26
	1st-year students – 48 (6.32%)			%
	2nd-year students – 36 (4.74%)	Egocentric > Pragmatic	35	4,61%
	3rd-year students – 21 (2.76%) 4th-year students – 21 (2.76%)	Egocentric > Existential	13	1,71%

Source: Own survey on the basis of conducted research

The quantitative distribution of types of orientation towards working with preschool children with speech and language disorders among students within one year of study is presented in Figure 2.

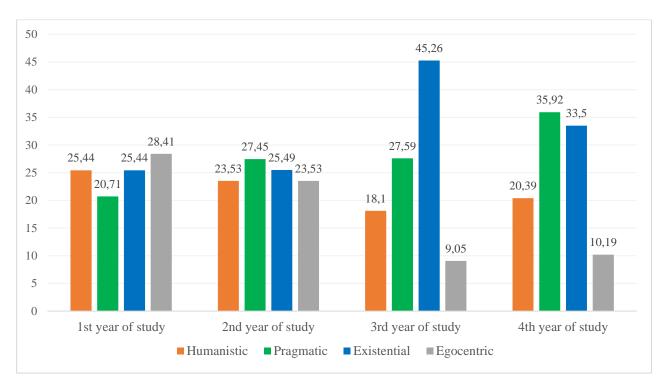


Figure 2. Types of future preschool teachers' orientation towards working with preschool children with speech and language disorders among students of 1st-4th years of study (in %)

Source: Own survey on the basis of conducted research

From the obtained data, we can state that the majority of future preschool teachers (33.68%) has had an existential type of orientation (with its subtypes) towards working with children with speech and language disorders. The largest number of respondents with this type of orientation are 3rd and 4th-year students – 13.81% and 9.08% respectively of the total sample of all survey participants. Within one year of study, this type of orientation has been recorded among almost half (45.26%) of the 3rd-year students, among a third (33.5%) – of the 4th-year students and among a quarter (25.44% and 25.49%) – of the 1st and 2nd years students. In our opinion, this can be explained by the fact that senior students focused on acquiring a future profession, try to prepare thoroughly both for classroom lessons and for doing pedagogical practice tasks. They analyse the available sources of information, acquire additional knowledge during academic mobility, conferences, practical seminars, and webinars, observe and analyse the work of practicing educators, and carry out self-observation, self-analysis, and self-reflection of their own pedagogical activities during practice.

The pragmatic type of professional orientation (with its subtypes) was observed among 28.29% of future preschool teachers. According to the survey results, this type of orientation was mostly demonstrated by students of the 4th year of study – 9.74% of respondents in overall sample and 35.92% – within the year of study. Also, the pragmatic type of orientation was recorded among more than a quarter of the 2nd and 3rd-years students – 27.45% and 27.59%, respectively. Among

respondents of the 1st year of study, this type of orientation was observed in 20.71%. We explain such prevalence of the pragmatic type of orientation among students of different years of study by the fact that senior students have already had the opportunity to try themselves as teachers during active practices in preschool educational institutions, interacting with children with different speech abilities as well as developing and conducting various forms of work with them. It seems to us that the experience gained by the students motivates them for further development and success in their professional activities, which affected the responses of the survey participants. On this basis, we interpret their answers as a pragmatic type of professional orientation towards working with preschool children with speech and language disorders.

21.45% of respondents have a humanistic type of professional orientation (with its subtypes). Within the total sample, it has been observed among almost the same number of students of the 1st, 3rd and 4th years of study – 5.66 %, 5.53 % and 5.53 % respectively, as well as among 4.73 % of respondents of the 2nd year of study. The distribution of respondents with a humanistic type of pedagogical orientation by years of study is following: 25.44% of the 1st-year students, 23.53% of the 2nd-year students, 18.1% the 3rd-year students, and 20.39% of the 4th-year students. This percentage distribution of results, in our opinion, is more related to the personal and professional qualities of the students, as well as their beliefs (especially among junior students) that a preschool teacher, within the framework of his professional functions, can and should identify children's speech and language disorders and carry out the necessary corrective-developmental and educational measures with them. Educator, according students' opinion, should also, if necessary, refer children to special educators, primarily speech therapists, and interact with them in the future regarding the development, upbringing, and education of preschoolers with such developmental issues.

The egocentric type of professional orientation (with its subtypes) was observed among 16.58% of respondents, mostly students of the 1st and 2nd years of study – 6.32% and 4.74% of the total sample of respondents, respectively, as well as among the equal number (2.76%) of students of the 3rd and 4th years of study. The indicated percentage distribution of respondents and the analysis of the results regarding the specified type of orientation within the years of study confirm that 28.41% of the 1st-year students and 23.53% of the 2nd-year students has had an egocentric type of professional orientation, while among the 3rd-year students it has occurred in 9.05%, and among the 4th-year students – in 10.19% of the survey participants. Similarly, to the humanistic type of the professional orientation, we believe that egocentric type is largely determined by the personal and professional qualities of future preschool teachers, as well as their ambitious plans for realization in their chosen profession, in particular, promoting themselves as specialists who can work with preschool children with different speech abilities.

As we have already noted earlier, the most optimal for the future preschool teachers' work with children with speech and language disorders is a distinct humanistic type of professional orientation, as well as its combination with pragmatic or existential types in equal proportions, or slight dominance over them. Less optimal, but such that make it possible to form the ability of future preschool teachers to work with children with speech and language disorders, in our opinion, are distinct pragmatic or existential types of professional orientation, as well as their equal proportion or slight dominance over each other or over the humanistic type. The combination of humanistic, pragmatic or existential types in the equal ratio with the egocentric type of professional orientation, or with a slight dominance over it, a distinct egocentric type, as well as its dominant combination with the humanistic, pragmatic or existential type are not favourable for the forming future preschool teachers' ability to work with children with speech and language disorders. Thus, the results we have obtained (table 5) allow us to state that 21.45% of students have a humanistic professional orientation, which is optimal for the forming their professional competence "ability to work with children with speech and language disorders". Another 58.42% of the survey participants have subtypes of pragmatic and existential types of professional orientation, which are less optimal for forming the specified future preschool teachers' competence, but can be considered as a foundation for this process, provided that a system for training future preschool teachers to work with children with speech and language disorders is implemented in higher education institutions. 20.13% of students have suboptimal subtypes of professional orientation (mostly with a predominance of the egocentric type) regarding the forming their professional competence "ability to work with children with speech and language disorders", which necessitates the implementation of the aforementioned system for training future preschool teachers into the educational process of higher education institutions.

In order to confirm the statistical reliability of the obtained results regarding the dependence of future preschool teachers' motivation to work with preschool children with speech and language disorders on the type of professional orientation towards the development and correction of children's speech within the professional functions of the educator, we have calculated the Pearson's correlation for a sample of 702 people (taking into account the critical values for the degree of freedom k = n - 2). The obtained coefficient r = 0.3349 is greater than the critical values (for a sample of 700 people r_{crit} for 95% reliability is 0.07, and for 99% reliability - 0.10) and indicates a close relationship between the studied phenomena. Thus, the future preschool teachers' professional motivation in general and its components (motives, needs, interests, etc.) depend on their type of professional orientation, including one towards working with children with speech and language disorders.

Conclusions

The results of the study have shown that for future preschool teachers, the motivational sphere (needs, motives, aspirations, beliefs, etc.), professional motivation and orientation are important

factors in choosing and mastering the pedagogical profession, in particular in the aspect of working with preschool children with speech and language disorders.

Theoretical analysis of scientific works has shown that researchers mainly distinguish external and internal motives for professional activity, the combination of which determines the motivational complex for mastering a certain profession and developing in it. For the preschool teacher's professional activity with children with speech and language disorders, the predominance of internal (intrinsic) motivation over external (extrinsic) is optimal. It has been found that the preschool teachers' professional (pedagogical) orientation, given the belonging of the specified profession to the "person-to-person" system, should primarily be of humanistic type. At the same time, its combination with pragmatic and existential types is not excluded for the successful solution of the tasks of correctional, educational and developmental work with children with speech and language disorders within the professional functions of a preschool teacher.

Based on the conducted experimental research, the leading motives and motivational complexes for professional activity, as well as the types of professional orientation of the 1st-4thyear students, have been identified. It has been found that mostly, future preschool teachers were guided by internal motives in choosing a profession. Their leading needs are the acquisition of thorough knowledge in preschool pedagogy, children's psychology, methods of preschool education, speech therapy, and their transformation into practical skills and abilities, the gaining of experience in working with preschoolers, including those with speech and language disorders, constant improvement and advanced training. The future educators' professional interests also correspond to them, in particular, the creation of an inclusive environment for each child in accordance with his/her age and needs, contributing to the formation of his/her personality, and the development of potential opportunities. Such data indicate a high and sufficient level of future preschool teachers' motivation for work with children with speech and language disorders. It has been found that almost half of the future educators have an optimal motivational complex for working with children with speech and language disorders, in which intrinsic motivation prevails over extrinsic positive and extrinsic negative. However, a quarter of students have motivational complexes in which extrinsic types of motivation in various combinations prevail over intrinsic; the same number of students have intermediate complexes of suboptimal motivation. Regarding the types of future preschool teachers' professional orientation towards working with children with speech and language disorders, within which the specified types of motivation are formed and exist, the study has revealed that more than half of the students have pragmatic and existential types of orientation with their subtypes; in our opinion, they are not fully favourable for the work of teachers with children with speech and language disorders. About 1/5 of the respondents have demonstrated a humanistic professional orientation with its subtypes, which is optimal for the forming their professional competence "ability to work with children with speech and language disorders". At the same time, the same number of future educators also have exhibited the dominance of the egocentric type of professional orientation, which is suboptimal not only for working with preschoolers with speech and language disorders, but also for the preschool teacher's professional activities in general. The statistical analysis has proven the existence of a correlation between the type of orientation and the motivation of future preschool teachers for working with children with speech and language disorders – optimal and close to optimal types of professional orientation determine the predominance of students' internal (intrinsic) motivation in choosing a profession and further activity in the specialty.

All of the above leads to the conclusion that the identified motivational complexes and types of professional orientation of future preschool teachers require adjustment in order to increase their share of intrinsic motivation, develop needs, interests, beliefs, as well as personal and professional qualities necessary for working with preschool children with speech and language disorders. Therefore, it is relevant to develop a system for training future preschool teachers to work with children with speech and language disorders and implement it into educational process of higher education institutions; it also will enable to form future educators' optimal motivation and orientation towards such activities.

References

- Bergmark, U., Lundström, S., Manderstedt, L., & Palo, A. (2018). Why become a teacher? Student teachers' perceptions of the teaching profession and motives for career choice. *European Journal of Teacher Education*, 41(3), 266–281. https://doi.org/10.1080/02619768.2018.1448784
- Bespalko, V. P. (2000). Psihologicheskie paradoksy obrazovaniya. [Psychological paradoxes of education]. *Pedagogika Pedagogy, 5,* 13-20. [in Russian].
- Danilova, T. N. (2004). Oprosnik diagnostiki tipa napravlennosti lichnosti prakticheskogo psihologa. [The questionnaire of diagnostics of practical psychologist's personality orientation type]. Praktichna psihologija ta social'na robota – Applied psychology and social work, 8, 41-44. [in Russian].
- Deci, E. L. & Flaste, R. (1996). Why We Do What We Do: Understanding Self-Motivation. London: Penguin Books.
- Dobryden, A. (2011). Humanistychna spriamovanist ta pedahohichna kultura suchasnoho vchytelia. [Humanistic orientation and pedagogical culture of a modern teacher]. *Problemy pidhotovky suchasnoho vchytelia Problems of training a modern teacher, 4,* Vol. 2, 151-158. [in Ukrainian].

- Hagger, M. & Hamilton, K. (2020). General causality orientations in self-determination theory: Metaanalysis and test of a process model. *European Journal of Personality*, *35*(5), 710-735. DOI: 10.1177/0890207020962330
- Heckhausen, J., & Heckhausen, H. (2010) *Motivation und Handeln* (4.Aufl.). Berlin, Heidelberg, New York: Springer.
- Herzberg, F. (1966). Work and the nature of man. Cleveland, OH: World Publishing Company.
- Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The Motivation to Work*. New York: John Willey & Sons.
- Honcharenko, S. U. (1997). *Ukrainskyi pedahohichnyi slovnyk. [Ukrainian Pedagogical Dictionary]*. Kyiv: Lybid. [in Ukrainian].
- Kudusova, A. Sh. (2005). Formuvannia humanistychnoi spriamovanosti maibutnikh uchyteliv pochatkovykh klasiv u protsesi profesiinoi pidhotovky. [Formation of the humanistic orientation of future primary school teachers in the process of professional training]. (PhD thesis); Institute of Pedagogy and Psychology, Academy of Pedagogical Sciences of Ukraine. Kyiv. [in Ukrainian].
- Kuzminskyi, A. I. (2005). *Pedahohika vyshchoi shkoly.* [*Pedagogy of higher education*]: a textbook. Kyiv: Znannia. [in Ukrainian].
- Liashenko, I. V. (2013). Formuvannia profesiinoi motyvatsii studentiv do uspishnoi fakhovoi diialnosti. [Forming of students' professional motivation for successful professional activity]. Narodna osvita Public education, 1(19). URL: https://essuir.sumdu.edu.ua/bitstream-download/123456789/67593/4/Liashenko Formuvannia profesiinoi motyvatsii.pdf [in Ukrainian].
- Litovka, O. P. (2014). Pedahohichna spriamovanist osobystosti yak bazova osnova rozvytku profesiinoi pozytsii maibutnoho vchytelia. [Pedagogical Orientation of the Individual as the Basic Foundation of the Future Teacher Professional Position]. *Pedahohika formuvannia tvorchoi osobystosti u vyshchii i zahalnoosvitnii shkolakh Pedagogy of creative personality formation in higher and general academic schools*, 38, 216 219. [in Ukrainian].
- Maslow, A. H. (1943). A Theory of Human Motivation. Psychological Review, 50(4), 370-96.
- Pavlova, O. (2015). Teoretychni osnovy profesiinoi motyvatsii do pedahohichnoi diialnosti. [Theoretical basis of professional motivation for teaching activities]. *Naukovi zapysky kafedry pedahohiky Scientific Notes of the Pedagogical Department*, 1 (38), 196-204. URL: https://periodicals.karazin.ua/pedagogy/article/view/2763 [in Ukrainian].
- Pinska, O. (2009). Profesiina motyvatsiia yak zasib pidvyshchennia efektyvnosti navchalnoi diialnosti studentiv. [Professional motivation as a means of increasing the effectiveness of

- students' educational activities]. *Problemy trudovoi i profesiinoi pidhotovky Problems of labour and professional training, 14,* 111-115. [in Ukrainian].
- Pobirchenko, N. A. (Ed.). (2007). *Psykholohichnyi slovnyk. [Psychological Dictionary] / Compilers V. V. Siniavskyi & O. P. Serhieienkova. Kyiv: Naukovyi svit. [in Ukrainian].*
- Prokhorenko, L. I. et al. (Eds.). (2022). Metodychni rekomendatsii shchodo vyznachennia osvitnikh trudnoshchiv ta rivniv pidtrymky u ditei rannoho ta doshkilnoho viku [Methodological recommendations for determining early and preschool age children 's educational difficulties and levels for support]; Ministry of Education and Science of Ukraine, National Academy of Science of Ukraine, M. Yarmachenko Institute of Special Pedagogy and Psychology. Kyiv, URL: https://mon.gov.ua/static-objects/mon/sites/1/doshkilna/2022/06/23/List.MON-4.1196-22-08.6.2022.pdf [in Ukrainian].
- Rean, A. A. (1999). *Psihologiya izucheniya lichnosti. [Psychology of studying the personality]*. St. Petersburg: Publishing house of Mikhaylov V. A. [in Russian].
- Roness, D., & Smith, K. (2010). Stability in motivation during teacher education. *Journal of Education for Teaching*, 36(2), 169–185. https://doi.org/10.1080/02607471003651706
- Ryan, R., & Deci, E. (2000). Self-Determination Theory and the Facilitation of Intrinsic Motivation. Social Development, and Well-Being. *American Psychologist*, 55(1), 68-78.
- Serhieienkova, O. P., Stoliarchuk O. A., Kokhanova, O. P., & Paseka, O. V. (2012). *Pedahohichna psykholohiia*. [*Pedagogical Psychology*]. Kyiv: Centr uchbovoi literatury. [in Ukrainian].
- Shapar, V. B. (2007). Suchasnyi tlumachnyi psykholohichnyi slovnyk. [Modern explanatory psychological dictionary]. Kharkiv: Prapor. [in Ukrainian].
- Sinclair, C. (2008). Initial and changing student teacher motivation and commitment to teaching. *Asia-Pacific Journal of Teacher Education*, 36(2), 79–104. https://doi.org/10.1080/13598660801971658
- Sotnikova, A. V. (2010). Professionalnaya motivaciya kak predmet sociologicheskogo analiza [Professional motivation as a subject of sociological analysis]. *ISOM*, *3*, 118-123. [in Russian].
- Tekin, A. K. (2016). Autonomous motivation of Omani early childhood pre-service teachers for teaching. *Early Child Development and Care*, 186(7), 1096–1109. https://doi.org/10.1080/03004430.2015.1076401
- Yerokhin, S., Nikitin, Yu., & Nikitina, I. (2011). Kontseptsiia profesiinoi motyvatsii studentiv yak faktoru konkurentnosti na rynku pratsi. [The concept of the professional motivation of the student as a factor of the competition on the labor market]. *Yurydychna nauka Legal Science*, *1*(1), 20-27. [in Ukrainian].

- Zahorodnia, L. P. & Titarenko, S. A. (2010). *Pedahohichna maisternist vykhovatelia doshkilnoho zakladu. [Pedagogical skills of a preschool teacher]*: a textbook. Sumy: Universytetska knyha. [in Ukrainian].
- Zahorodnia, L. P. (2001). Formuvannia osnov pedahohichnoi tekhniky v maibutnikh fakhivtsiv doshkilnoho vykhovannia. [The formation of the basis of the pedagogical technology of the future specialists of preschool education]. (PhD thesis); M.P.Dragomanov's National Pedagogical University. Kyiv. [in Ukrainian].
- Zamfir, K. (1983). Udovletvorennost' trudom: Mnenie sotsiologa. [Job Satisfaction: Opinion of a Sociologist]. Moscow: Politizdat. [in Russian].
- Zaniuk, S. S. (2002). *Psykholohiia motyvatsii.* [*Psychology of motivation*]: a textbook. Kyiv: Lybid. [in Ukrainian].
- Ziaziun, I. A. (Ed.). (2004). *Pedahohichna maisternist [Pedagogical skills]:* a textbook for students of higher pedagogical educational institutions; Ministry of Education and Science of Ukraine. 2nd ed., supplemented and revised. Kyiv: Vyshcha shkola. [in Ukrainian].

ANALYSIS OF THE MAIN PEDAGOGICAL MEANS OF FORMING THE NATIONAL AND LINGUISTIC PERSONALITY OF A PRESCHOOL CHILD

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Introduction. The current stage of development and formation of the Ukrainian state considers the modernisation of preschool education to be one of the priority areas of national policy to ensure the comprehensive harmonious development of the child's personality. It is also known that the basic condition for the harmonious personal and psycho-emotional development of a child is the preservation of the speech function or, in the case of speech dysfunction, the correction and development of all its structural parts as a full-fledged means of communication. In addition, current trends in the development of international and national preschool education point to increased attention of theory and practice to the problem of preschool children's successful socialisation in a small group and in society, and socialisation, in turn, is impossible without communication skills, including speech activity. In accordance with the requirements of the state social order, one of the main tasks of education modernisation is the formation of a Ukrainian nationally conscious linguistic personality, characterised by a culture of communication, a conscious attitude to the mother tongue, formed linguistic competence in various spheres of communication, and the ability to create and be mobile. That is why a linguistic personality needs to be brought up at the stage of preschool childhood, and the speech of his/her pupils will depend on how well the teacher knows the language, how accurate, clear, expressive, imaginative, creative his/her speech is.

Thus, the issue of the formation of the pupils' speech personality in preschool education institutions is relevant.

The main part. Education of a national and linguistic personality is a complex systematic and purposeful activity of state authorities, public organisations, families, preschool education institutions and other social institutions aimed at forming in preschoolers a high national consciousness, a sense of loyalty, children's ability and desire to communicate in Ukrainian, love for the Motherland, concern for the welfare of their people, readiness to fulfil civic and constitutional duty to protect national interests, integrity, independence of Ukraine, promotion of the Ukrainian language and culture development. The most important priority of the national and linguistic personality is the formation of the preschool child's value attitude to the Ukrainian people, Motherland, state, nation. The concept of national personality is along with the concept of linguistic

personality. It is well known that there is no language without a nation, and a nation cannot exist without a language. The basis of the existence of any ethnic group is its language. If there is no language, there is no nation.

The ways of forming a national and linguistic personality in modern conditions should be through enriching the worldview of preschool children with certain knowledge, forming an idea of social phenomena and events in the light of generally accepted interpretations, accumulating social experience of life in the immediate environment (family, street, city (village, town)), through involvement in its culture, family traditions, fostering love for the Motherland and home.

According to I. Bekh and K. Chorna, 6-year-old children identify personal values, their emotional development takes place, which is consolidated in their activities, behaviour and interpersonal relationships. Six-year-old children develop a distance of social ties in the process of assessing the norms of children and adults' behaviour; they develop a certain orientation towards society, the ability to understand and evaluate social relations at an appropriate level. At the age of six, a child begins to understand the importance of socially significant affairs, develops a certain understanding and assessment of social phenomena, and an orientation towards the evaluative attitude of an adult through the prism of specific activities.

One of the important pedagogical tasks defined by the Law of Ukraine "On Preschool Education" is to educate children to love Ukraine, respect for the family, respect for folk traditions and customs, the state and native language, national values of the Ukrainian people, as well as the values of other nations and peoples, and a conscious attitude towards themselves, their surrounding and the environment.

The great teacher V. Sukhomlynskyi emphasised: "In childhood, a long process of cognition begins – cognition with both mind and heart – of the moral values that underlie morality: boundless love for the Motherland, the desire to become a true patriot, a true fighter" [27].

Preschool age is an important period for the formation of a person's morality. It is during this period we see the foundations for the formation of morality, feelings, perception of the world, and awareness of one's self are laid. Vivid impressions of the native nature beauty, creative work of people, heroic deeds of the Ukrainian people contribute to the education of children's love for the family, the Ukrainian people, and their homeland.

Senior preschool age is the period of a child's life when the foundations of a nationally conscious citizen, a patriot, i.e. a person who has personal qualities and character traits, a worldview and way of thinking, feelings, actions and behaviour aimed at the self-development of a democratic civil society in Ukraine, can be laid.

Preschool education in Ukraine is aimed at fostering a nationally conscious, well-developed personality with high moral values. The priority educational task is to prepare a preschooler for active

life in today's environment, which requires rethinking the established organisation of the Ukrainian language teaching process in accordance with the needs of society and the directions of language education development. Society's need for active, creative, proactive, gifted, intellectually and spiritually developed citizens determines the orientation of the educational process towards the formation and development of a personality that is also capable of self-education, self-development, self-improvement, able to use the acquired knowledge to creatively solve life problems, and strives to realise him/herself.

The Ukrainian (native) language plays a leading role in the personal development of preschool children. After all, the child's personality is formed mainly on the language, on the lexical and conceptual apparatus and its means, and is revealed as an educated bright individual.

Today, the main goal of learning and using the Ukrainian language in preschool education is to develop preschoolers' communicative competence. This should be a personality who not only knows the language, but also uses it fluently, taking into account various life situations and observing the culture of communication.

The problem of forming a linguistic personality is given much attention in the studies of H. Bohin, L. Varzatska, M. Vashulenko, S. Karaman, V. Karasyk, Y. Karaulov, L. Matsko, L. Palamar, M. Pentiliuk, L. Skurativskyi and others. Their works examine the essence and level model of a linguistic personality, the development of such components as national and linguistic consciousness, language abilities, language sense, language taste, language and value orientations.

The tasks of the educational process are based on the principles of competence-based, cognitive-communicative, personality-oriented and activity-based approaches to learning.

Thus, the competence-based approach focuses on the activity-based content of education, which implies the question: "What are the ways to teach?", and on gaining experience in independent problem solving.

The communicative approach means learning a language as a means of communication.

The socio-cultural approach involves learning the language through the prism of ethnography and the original and vibrant culture created by Ukrainians, which enriches the universal culture, combining and processing information about the world learned in other subjects into a personal view of life, one's place in it, and one's own beliefs.

In the modern conditions of the educational process of preschool education, a personality-oriented approach is used providing optimal conditions for the comprehensive speech development of each child, taking into account his or her individual characteristics, cognitive needs, interests, aspirations, encouraging independence in language learning, self-knowledge and self-development.

The Basic Component of Preschool Education envisages the transition of preschool education to creative technologies of upbringing and education, modernisation of the preschool education

content by ensuring the comprehensive development of preschool children in accordance with their inclinations, abilities, individual and age characteristics, and cultural needs. The programme aims to encourage scientists and practitioners to:

- formation of creative personality;
- supporting the achievements of the individual originality of the child's unique life
 path;
- development of such personal qualities as curiosity, initiative, independence,
 creativity, ingenuity in children [1].

The central figure of the educational process is the child – a speech personality. In working with preschoolers, we continue to search for and provide nature-based components of the environment that would help fully develop a speech personality. The basis of the developmental environment for the formation of such a personality is to provide a friendly atmosphere where the child is given the right to speech activity, trust, mistakes and a friendly attitude. The first and most important component of a successful process is to saturate the speech environment in which the child is permanently or temporarily present with samples of the native language. A child's speech is a special form of activity and a special result of his or her efforts to master the life space. It is the most important intellectual feat in life. Given that it is the speech of adults that influences the child's speech, we single out imitation as an important way and means of learning to speak. By imitating, the child perceives and adopts the only correct, unchanging ways of speech communication of the environment around him/her.

Creating a speech-spatial environment in the IPE involves taking into account the following requirements: stimulation of the child's search activity and speech activity (A.M. Bohush); satisfaction of speech needs in cultural and value cognition of the environment; presence of speech and creative orientation (N. V. Havrysh); freedom and independence of the child; integrative nature (K.L. Krutii); consideration of gender and age peculiarities of the child (V.F. Bazarnyi); dialogicity (A.G. Arushanova); stability-dynamism; humanisation (S.U. Honcharenko). Practical implementation of the creation of an educational speech environment also involves the creation of mini-environments that would reflect the essence of the subject-speech and speech-spatial environments. Let's name them.

Cultural and cognitive, which aims to create opportunities for the child's independent acquisition of sensory standards (color, shape, space, sound, taste, smell, etc.) as a means of enriching speech experience.

Speech and creative, which aims to create opportunities for independent speech and creative process (drawing, modelling, design, floristry, etc.).

Speech and communicative, designed to provide the child with opportunities for speech development, artistic and speech activities.

Ecological and speech, which should help to create conditions for the development of ecological ideas, accumulation of speech experience, harmonious attitude to the natural world, etc.

Emotional and reflexive, which will encourage self-knowledge of oneself, one's inner world, self-image, etc. It should be noted that we have outlined only some mini-environments, there may be many more. The number of mini-environments depends on the goal that an adult sets when interacting with children. The relevance of timely speech development in preschool childhood is determined by the tasks of creating optimal conditions for the fullest possible disclosure of the each child potential, which are manifested in specifically childhood activities and are related to communication. The development of all mental functions, mental processes, and personality in general is impossible without interpersonal contact. At the same time, speech development and its improvement should be considered as a reflection of the formation of communicative and speech interaction skills. The ability to communicate is understood as a complex ability to use the means of interaction (non-verbal, practical, linguistic) that ensure the success of communication goals.

The prominent educator Konstantin Ushinsky noted that the mother tongue is the basis of mental development and the treasure trove of all knowledge. By mastering speech and learning a language, a child acquires a system of knowledge and socially accepted norms of behaviour – the basis of his or her life competence. So, the problem of developing a child's speech has always been one of the central issues in preschool education. In order to ensure the effectiveness of teaching preschoolers the Ukrainian language, it is recommended to direct efforts towards creating a speech developmental environment. Namely:

Natural environment. Plants of the immediate environment, typical for the area, cultivated, garden plants, indoor plants, etc. Adults should know and use the Ukrainian names of living and non-living objects and natural phenomena.

Subject environment. It includes: objects and toys that will ensure children's practical and playful activities. Sets of subject and plot paintings, collections of illustrations to folklore material. Collections of fiction and folklore works and illustrations to them. Selections of Ukrainian artists, paintings by local artists. Didactic games and tasks of communicative, speech, linguistic orientation for the development of creative speech. TV programmes, animated films. Board and print games, intellectual games, etc.

Social environment. It includes: an educator who is fluent in spoken language, artistic speech, and uses Ukrainian folklore in everyday life. An assistant teacher who is able to support a conversation in Ukrainian. Parents who understand the need for their child to master the Ukrainian language, support the child's attempts to speak, and help them. Creating a favorable, encouraging

atmosphere for the use of the Ukrainian language. Partner position of an adult - a carrier of information and an authoritative person for the child. Providing language support from all adults who communicate with the child in one way or another.

The child's own environment. It will contribute to the formation of Ukrainian language skills and abilities if the teacher is able to motivate and foster in the child the desire and then the need to learn and speak Ukrainian. The organisation of the language environment in the IPE includes:

- selection and training of teaching staff.
- creation of a subject-developmental environment that would have a sufficiently rich language content, as well as ensuring the identification of speech difficulties experienced by teachers in order to correct them.
 - diagnostics of children's speech development at each age stage.
 - creating a counselling service for parents.

The educational speech environment should always be developmental and provide the child with the opportunity to express his or her speech abilities. The practical implementation of the idea of creating a developmental speech environment in preschool settings involves building such an environment in two directions: subject-speech and speech-spatial.

In the process of creating a subject-speech area as a source of preschooler's speech experience, it is necessary to proceed from ergonomic requirements for life activity: anthropometric, physiological and psychological characteristics of a child who will develop in this environment. For children of the 5th year of life, it is necessary to use various materials that facilitate reading acquisition: printed letters, words, tables, books with large print, board games with letters, puzzles. Materials that stimulate the development of children's cognitive activity are also used: children's encyclopaedias, illustrated publications about flora and fauna, children's magazines, albums. A place should be allocated for didactic games, where children can exercise independence in choosing the material. Let's not forget about objects for research and exploration activities – magnets, magnifying glasses, springs, scales, a large selection of natural materials [4]. It is more effective to create an environment in which everyone has the right and duty to be themselves. The environment will be developmentally appropriate and comfortable for the child, provided that he or she is given the opportunity to dose speech and communication activities.

Thus, the teacher should fill the child's life with children's activities and forms of activity; fill the environment with emotional events, facts, as emotions are the basic basis of the child's mental development; enable the child to independently determine the time, duration of contacts, coordinate the dosage and self-dosage of adult and child speech activities; intersperse the expansion of partners in communication with solitude; to take into account the child's success or failure in previous speech

activities; to determine the scope, time, place, intensity of speech activities as fragmentary independent or as a component of other children's activities (cognitive, musical, motor, visual, etc.); to provide for the mutual influence and complexity of the child's spheres of life that have a speech frame or speech basis. The main thing is the targeted orientation of speech, the presence of an interlocutor, a partner in communication, to whom the word is addressed, from whom an emotional or linguistic response is expected. The harmonisation of the teacher's relationship with the child is the basis for revealing the ways of linguistic interaction with the world of nature, culture, people and with their own world [5]. The developmental environment is a set of conditions that ensure the comprehensive development of children; it is a system of material objects of their activities. Creation of a full-fledged developmental environment in the IPE and ensuring the appropriate position of the educator in organising children's activities is a leading means of implementing the tasks of modern education reform. After all, a properly organised developmental environment contributes to the socialisation of a child and affects all aspects of his/her development. The task of the teacher is to ensure the interests of the child in meeting his or her natural inclinations and needs. An adult in his/her pedagogical activity is guided by the following statement: "Not next to, not above, but together". M. Montessori was one of the first to pay attention to the problem of the developmental environment, who considered free independent activity in the spatial and subject environment created by the teacher to be the most important prerequisite for the child's disclosure of inner potential. Therefore, in her opinion, the task of the teacher is primarily to provide the child with the means of self-development and to familiarise him or her with the rules for using them. An enriched environment implies the unity of social and natural means of ensuring the child's full life. This includes architectural, landscape, natural and ecological objects; art studios; playgrounds and sports grounds; construction sets; thematic sets of toys, manuals; audiovisual and information tools for education and training.

It is important to remember that the developmental space is created not for the convenience of the teacher, but so that the child can freely choose this or that centre according to his or her tastes and mood. It is not necessary to care only about the quantitative filling of the group room with game attributes and at the same time to forget that their sufficient number does not always ensure the full development of children [8]. As you know, an empty and colorless object and game environment has a negative impact on children, inhibits personality development. An oversaturated object environment also has a bad effect on the kids' psyche. Only a periodically renewed, variable, optimally organised object and game environment has a developmental impact, encourages the child to active cognitive activity, positively affects his or her emotional sphere, and mobilises thinking processes. The basis of the developmental environment for the formation of such a personality is to provide a friendly atmosphere where the child is given the right to speech activity, trust, mistakes and a friendly attitude. The first and most important component of a successful process is to saturate the speech environment

in which the child is permanently or temporarily present with samples of the native language. A child can develop as a representative of humanity and as an equal member of it only under the influence of the speech of the people around him or her. Trusting relationships and personal contacts with adults have a positive impact on the content and level of positive activities of preschoolers, as they gradually lay the basic qualities of personality (independence, responsibility, creativity, self-control, justice, prudence, humanity, etc.) necessary for the child's self-expression and self-realisation in his/her free being [11]. Employees of IPE also need to avoid conflicts, be calm and attentive. Their behaviour and actions should positively influence the development of children's mental processes. The general tone of speech of pedagogical staff should be moderate, remarks should be calm, appropriate and correct. Education, upbringing and development of a child should take place in an atmosphere of security and psychological comfort. This means that the child's environment must be safe in terms of hygiene, living conditions in general, and in the moral and psychological aspect. First of all, the environment should correspond to the structure of the child's cognitive sphere, provide opportunities for free development of play and other activities" [12]. In the organisation of developmental space, a special place is occupied by the formation of a child's positive self-esteem, awareness of self-worth among people – peers and adults. When creating a developmental space in a preschool institution, certain principles should be followed, in particular, such as: safety, consideration of the patterns of children's development, rationality, dynamism, activity, comfort of each child, positive emotional load [13]. The developmental space of the group room involves the creation of special cells. The following centres can be created in the group premises of preschool educational institution:

- natural history;
- children's experimentation;
- play activities;
- artistic activity;
- musical;
- ethnography;
- developmental learning;
- sports;
- labour activity;
- recreation and solitude;
- cooperation with parents.

The territory of the IPE is also a part of the developmental space. It is proposed to allocate the following thematic zones on the territory: ecological (garden, vegetable garden), where children could

engage in various types of agricultural work; architectural and landscape; sports and game; game for motor, didactic, constructive, role-playing games, etc. [14].

Communication, discussion, speech and creative activity, thinking aloud without fear of making a mistake or disagreeing with an adult's opinion should be a priority for the speech and developmental environment. The basis for the emergence of a child's own position is his or her life experience, and it is acquired, accumulated and realised by each child in his or her own way. Let's evaluate the child's path, which will not always be planned by us, predictable in form or content, but it is the child's own achievement [15]. The creation of a developmental speech environment is focused on the values and interests of the child, takes into account age-related capabilities, preserves children's subculture, enriches and amplifies child development, and interconnects all aspects of the child's life. The creation of a speech environment in the IPE provides:

- optimal speech load on the child in order to protect against tiredeness;
- emotional well-being of each child;
- children's involvement in universal and ethno-sociocultural values;
- interaction with families to ensure the full development of children's speech and language;
- organisation of activities in three forms: speech classes as a specially organised form of education;
- unregulated types of speech activities.

Conclusions. Thus, the above-analysed main pedagogical means of forming preschooler's national and linguistic personality can be successfully implemented in preschool educational institutions through active work and interaction of teachers and preschoolers. The red line through all the above-mentioned pedagogical means of forming a national and linguistic personality is the preschooler's perception of the family, home as the primary centre of the child's socialisation and further moving to a similar perception of the schoolchild of his/her hometown, country, language, people. The problem of national and linguistic development includes many aspects in its structure due to its integrative function, so it is equally important for all levels of education, starting with preschool. The feeling of belonging to a particular nation through language does not appear by itself, it is the result of a long-term educational influence on a person. National and linguistic education of children is a very complex process that requires equipping preschool teachers with appropriate methodological tools and their awareness of the need and importance of such work with preschool children.

Thus, taking into account the theoretical analysis of scientific sources, it can be determined that the conditions for the national and linguistic personality formation are manifested in practical activities aimed at the comprehensive development of the child, protection of his/her interests,

fostering love and respect for the native language and the country as a whole. The national and linguistic personality is manifested in respect for the interests, rights, identity of people of other nationalities, tolerance, willingness and ability to compromise with different ethnic and religious communities, to build their own state and not to seek support and reliance on anyone else, for the sake of peace in their country and in the world.

REFERENCES

- 1. Basic component of preschool education (new edition) of 12.01.2021 URL: https://mon.gov.ua/storage/app/media/rizne/2021/12.01 (accessed 09.12.2022)
 - 2. Bekh, I.D. (2014) Programme of patriotic education of children and students. Kyiv.
- 3. Bohush, A. (2017) Influence of multicultural speech environment on the formation of linguistic personality. *Mountain School of the Ukrainian Carpathians*. 16, 11-14.
- 4. Bohush, A.M. (2007) Development of the child's linguistic personality in a multicultural environment: theoretical aspect. *Science and Education: Scientific and Practical Journal*. 1-2, 59-62.
- 5. Bohush, A.M. (2004) Speech development of children (from birth to 7 years): a monograph. Kyiv: Vydavytelnyi Dim.
- 6. Bohush, A.M., Havrysh, N. (2012) Optimisation of speech work with children in the developmental environment of preschool educational institution. *Preschool education*. 10, 5-9.
- 7. Bohush, A.M. (2013) Speech portrait of a five-year-old child. *Preschool education*. 7, 6-10.
- 8. Vashulenko, M.S.(2001) Formation of the linguistic personality of the younger schoolchild in the conditions of transition to 4-year primary education. *Primary school*, 1, 11-14.
 - 9. Dychkivska, I.M. (2004) Innovative pedagogical technologies. Kyiv.
- 10. Yermolenko, S.Y., Matsko, L.I. (1995) Educational concept of learning the Ukrainian (state) language. *Primary school*, 1, 33-37.
- 11. Zhyvitska, I. A. (2010) Language picture of the world as a reflection of reality. *Philological studies. Scientific Bulletin of Kryvyi Rih State Pedagogical University*. 4, 20-25.
- 12. Kaplunovska, O. (2016) *Ukraine is my Motherland. Partial programme of national and patriotic education of preschool children*. Ternopil: Mandrivets.
- 13. Kononko, O.L. (2005) The benchmark of the present is a competent personality. *Preschool education*. 7, 7-9.
- 14. Concept of national-patriotic education of children and youth. URL: https://osvita.ua/legislation/Ser_osv/47154 (accessed 10.12.2022).

- 15. The concept of civic education development in Ukraine. URL: https://zakon.rada.gov.ua/laws/show/710-2018-%D1%80#n10 (accessed 10.12.2022).
- 16. Kulyk, O. Language and speech personality: the problem of definitions. URL: http://ephsheir.phdpu.edu.ua/xmlui/bitstream/handle/8989898989 (accessed 08.02.2022).
- 17. Kulishenko, LA. (2011) Formation of national and linguistic consciousness of students in universities of economic profile. *Language and Culture*. 14, II (148), 389-394. URL: https://www.essuir.sumdu.edu.ua/bitstream-download/123456789/63577/5 (accessed 07.02.2022).
- 18. Mamchych, O.B., Raiska, L.H., Barnych, O.V. Formation of the Ukrainian-speaking personality of the future primary school teacher of the NUS: https://visnyk.chnpu.edu.ua/wp-content/uploads/2021/09/Mamchych-B.-Raiska-L.-Barnych-O.pdf (accessed 08.02.2022).
- 19. Mamchur, L. (2016) Development of the linguistic personality a priority direction of modern linguodidactics. *Actual problems of linguodidactics: realities and prospects*, 105 111.
- 20. Matsko, L. (1996) Ukrainian language and the formation of national consciousness. *Pedagogy and psychology.* 1, 67 70.
- 21. Scientific Bulletin of Uzhhorod University. Series: 'Pedagogy. Social Work.' 2017. Issue 1 (40).
- 22. Ohienko, F. (1991) *Ukrainian culture: A brief history of the cultural life of the Ukrainian people*. Kyiv: Abris.
- 23. Pentiliuk, M. I. (1997) The main aspects of teaching the mother tongue. *Primary school.* 4, 10 12.
- 24. Pirozhenko, T. (2002) Communicative and Speech Development of the Child: Monograph. Kyiv: Nora-print.
- 25. On approval of the action plan for the implementation of the Strategy of National and Patriotic Education for 2020-2025. URL: https://zakon.rada.gov.ua/laws/show/932-2020- \"D0%BF#Text (accessed 12.12.2022).
- 26. Bohush, A., Hrama, N. Lutsan, N. (2013) *Personality development of a preschool child in different types of activities*. Odesa: V. Bukaev.
- 27. Sukhomlynskyi, V.O. (1996) Moral precepts of childhood and youth. K.: Soviet school.
- 29. Trifonova, O. (2019) Formation of the speech personality of preschool children: methodological recommendations for independent work of students. Mykolaiv: Ilyon Publishing House.

COLLECTIVE PLAYING AS A MEANS OF POSITIVE SOCIAL ADAPTATION OF FIRST GRADERS TO SCHOOL CONDITIONS

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A child's social adaptation to school is the leading condition for his educational functioning: fulfillment of educational and social requirements, taking on role responsibilities of a pupil, etc. Such adaptation occurs not only at the external, behavioral level, but also at the internal, personal level: certain relationships and personal qualities are formed that make the child good and successful in studies. A socially adapted child is adapted to the comprehensive development of his personal physical, intellectual and other potentials in a new educational environment.

Inclusion in a new social environment at beginning of educational activities requires a new level of development and organization of all mental processes (perception, attention, memory, thinking), the ability to manage one's behavior.

The first year of study determines the further school life of the child. During this period, schoolchildren under the guidance of adults take extremely important steps in their development.

Social adaptation is a process in which a child or a group of children achieves a state of social equilibrium in the absence of conflict experiences with others. Social adaptation is considered as the final stage of the adaptation process as a whole, which ensures both physiological and psychological, as well as social well-being of the individual. First-graders must adapt to the requirements of those social groups that are specific to the school (peer group, teachers, pupils of other classes, etc.) (Honcharuk, 2013).

In a general interpretation, social adaptation should be characterized by the following main stages (Krupnyk, 2014; Kuzmenko, 2005):

- balance, which implies balance between a group and a person, who show mutual tolerance to the system of preferences and stereotypes of each other's behavior;
- pseudo adaptation, presented as a combination of external adaptation to a social group with a negative attitude towards its norms and requirements;
- adaptation, as recognition and acceptance of the preferences of the new social community, mutual compromises;
- similarity, detection of psychological reorientation of the personality, transformation of former opinions, orientations, views on the new situation.

Coming to the first grade, a child does not automatically become a pupil, he needs not only to learn to carry out educational activities, but at the same time in his life there is also a physiological process of adaptation to new intellectual, emotional and physical loads.

Starting school is a big stress for every child. All children are filled with feelings of joy, admiration or surprise at what is happening at school, they feel anxiety and confusion. For the first-graders, the first days (weeks) of attending school reduce the resistance of the body, sleep, appetite, can cause fever, chronic diseases.

The first-grader's adaptation period is associated with the transformation of previously formed stereotypes of their behavior and life skills, which leads not only to a number of difficulties in interacting with the surrounding world in everyday life, but also often causes a deterioration in academic success. In the first grade, there is a sharp decrease in the child's motivation to attend school and study, a drop in cognitive interest, which is associated with the difficulties of the adaptation period.

The main problems of social adaptation of primary school pupils in the first months of attending school can be characterized as difficulties of a social and psychological nature in adapting to the requirements of schooling. Let us list the difficulties that, in our opinion, should be paid attention to (Kryvchikova, 2008).

Changing the usual lifestyle: adult family members should clearly follow the requirements of the child's daily routine, monitor its observance: in particular, play, sleep, rest, remembering the child's hobbies and interests.

New relationships in the family: most of its members begin to take the child more seriously, they remind that he "merged" in his currently leading activity – studying at school. Attachment to children's behavior is growing. The process and results of education are at the center of the child's relationship with his parents.

Fading of interest in school: emergence of the first difficulties in learning; the child must be ready to make the necessary efforts, show perseverance, diligence. Further development of positive motivation to study depends on the formation of educational activities.

The specificity of relations with teachers: primary school pupils expect approval of their actions from the teacher, and in the absence of approval, they believe that the teacher "does not like" them.

It is worth emphasizing that the teacher must create all the conditions for the successful adaptation of first-graders to studying at school, and for this he must clearly understand the age-specific features of the mental development of a child of primary school age (Bekh, 2003; Honcharuk, 2013). Let us remind that each age stage of a child's mental development contains the following main components: social situation of development, leading activity, new psychological structures. The

difficulty of managing this process lies in the fact that the course of adaptation in different children occurs differently, it depends on their individual and psychological characteristics, the level of readiness of the child to study at school, as well as the level of comfort of the conditions created at school for working with first-graders.

Among the factors that can affect the success of a child's social adaptation to school, the following can be named.

Age of starting systematic education. Note that the adaptation period of 6-year-old children is longer than that of 7-year-old children. 6-year-old children have lower and unstable work capacity, they have increased tension in all body systems. The year, which separates 6 from 7 years, is very important for the physical, functional and mental development of the child. It is in this year that the following important social structures are formed: the regulation of behavior develops rapidly, orientation to social norms and requirements intensifies, and the foundations of logical thinking are laid.

Functional readiness for systematic training. The child's body must reach the level of development of individual organs and systems in order to adequately respond to environmental influences related to educational activities.

The level of adaptation mechanisms. It is much easier for the first-graders who attended a preschool education institution before entering school to adapt to school conditions than for "home" children who are not used to staying for a long time in a children's team.

Psychological readiness for studying at school. Such readiness involves: intellectual readiness (the level of development of cognitive abilities, interests and mental processes of memory, thinking, imagination, attention), emotional-volitional readiness (emotional maturity, volitional regulation of behavior, adequacy of emotional response), personal-motivational readiness (desire to go to school, study, realize one's social role as a schoolchild), communicative readiness (ability to communicate productively, finding compromise initiative), physical readiness (maturation of the body, its resistance to loads), etc.

Peculiarities of a child's life in a family. Its characteristics, such as a trusting psychological atmosphere in the family, equal relations between parents, a democratic style of upbringing, the role of the child in the family, his everyday life, etc., are of great importance.

Child's health. Scientists have proved that the state of health is one of the most important factors that affects not only motor activity, physical condition and academic success, but also the processes of adaptation to school conditions and the effectiveness of further education (Liubarska, 2011).

A healthy child is the greatest treasure in a family. Healthy and active pupils adapt to unusual conditions faster, and more correctly, in accordance with sanitary and hygienic requirements, the

organized process of motor activity of the first-graders is the most effective way to timely prevent fatigue and maintain high performance.

Ways of organizing educational activities. An appropriate schedule of the day, a rationally organized sequence of classes are the main conditions for maintaining interest in learning and strengthening the health of primary school pupils during the school year. Various active methods and technologies of teaching organization, the content of textbooks and educational programs – contribute to the expansion of educational opportunities of the first-graders, help to acquire educational competences, and strengthen the educational process in general. In addition, taking into account the age characteristics of pupils contributes to the development of skills to use the acquired knowledge in practice, prepares them for independent acquisition of knowledge, and shapes their worldview.

From a socio-pedagogical point of view, in our opinion, the following five important factors can be signs of a child's adaptation to school conditions:

- 1. Formation of cognitive processes. The child is ready to master the leading activity for this age (educational), demonstrates a sufficient level of social and psychological development (he is psychologically ready to participate in effective activities), finds its expression in school maturity and learning ability. The first-grader is successfully mastering the school curriculum.
- 2. Emotional processes related to learning. The learning process evokes positive emotions in a first-grader, the child demonstrates confidence in his abilities, does not feel afraid of unfamiliar situations.
- 3. Formation of the necessary prerequisites for educational activity. The child is ready to consciously subordinate his actions to the rules, methods of action, knows how to orient himself to the defined system of requirements, is able to listen carefully and independently perform the necessary tasks according to the model (in particular with the help or under the guidance of an adult).
- 4. Social factor. It manifests itself not only through broad social motives for learning, but also as motives related to the child's needs in communication with other people, in their evaluation and approval, with the pupil's desire to take a worthy place in the system of social relations available to him. A first-grader shows satisfaction with his relationships with classmates and teachers.
- 5. Stimulating the child. Sufficient level of socio-psychological development of the child, significant educational activities for the given age, the system of stimulating him as a subject of development on the part of the teacher and parents find their expression in faster school maturity and learning ability.

Among the important socio-psychological aspects of a first-grader's adaptation to school conditions, we can name the child's readiness to change his social status, the levels of formation of the culture of communication, behavior and activity, mastering socially adequate ways of realizing emotional states.

In general, the term socio-psychological adaptation is considered as a process that leads to such a state of relations between an individual and a group, when a person without prolonged external and internal conflicts productively performs leading activities, satisfies basic sociogenic needs, fully meets the roles and expectations of the reference group to which he belongs, is in a state of self-assertion and free expression of his creative abilities (Wenger, 2000; Kocherha, 2012).

Determining the important characteristics of children's socio-psychological adaptation to school conditions, scientists pay attention mainly to the necessary level of formation of means of communication, behavior and activity (Kravtsov, 2014). Therefore, the criteria that affect the social and psychological adaptation of children to school are academic success and discipline.

Note that scientists also define high, medium, and low levels of social adaptation depending on the child's attitude to school, the dynamics and results of learning the material, participation in social life, and social status in the team (Krupnyk, 2014).

A high level of social adaptation is characterized as a child's positive attitude to school, adequate response to requirements, deep and complete assimilation of educational material, diligence, attentiveness, performance of tasks without external control, independent performance of educational work, favorable social status in the classroom.

With an average level of social adaptation, the child generally has a positive attitude to school, its attendance does not cause negative experiences, the educational material is understood and assimilated in a detailed visual presentation, focus and attentiveness are manifested in the external control of an adult, social tasks are performed conscientiously, social status in the class team is in general positive.

With a low level of social adaptation, the child has a negative or indifferent attitude to school, mainly a depressed mood, complaints about ill health; the child learns educational material fragmentarily, cannot work independently with textbooks, violates discipline, prepares for lessons irregularly, needs constant supervision from adults, performs social tasks without special desire, has no close friends.

A child's social adaptation to school is a long process that is associated with significant stress in all body systems. Educators and psychologists for many decades have singled out the game as one of the effective methods of forming positive adaptation in the team. During the period of adaptation of the child to school, the most significant changes occur in his behavior. Usually, an indicator of difficulties in adaptation are changes in behavior, such as excessive excitement and even aggression or, on the contrary, inhibition, depression and fear, reluctance to go to school.

In the studies of scientists, playing is considered as a leading activity in preschool childhood, in which the main psychological structures for this age are formed, which are necessary for the next,

higher level of personality development. In primary school, playing activities are emotional support for the development of all other types of activities (Sergeenkova, 2012; Skrypchenko, 2019).

Playing of a primary school pupil should not be confused with fun. This approach to playing impoverishes it, loses its value, playing should be seen as a kind of transformative activity. Only with this approach to understanding playing, with this view of playing, it is possible to correctly assess its value and role in the social adaptation of a first-grader to school conditions, talk about the possibility of using it in educational work. Playing cannot be considered in isolation from other activities.

In addition, playing can satisfy the child's real needs and emotions, change their nature; it helps direct the child to actively manage emotions. Scientists suggest using playing both for social adaptation, and for understanding and realizing the importance of learning, and even as a means of therapy. Formation of a high level of social adaptation involves a combination of playing, creative and productive activities. Among the functions of the drama game, the following are defined (Akhanova, 208):

- imitation (the game helps to get used to real life situations and social roles);
- reflection of the child's experience (coming to school, each child has his own social experience of relationships with other people);
- expressiveness of repressed needs (vulnerable, alienated, prone to severe internal experiences children have the opportunity to demonstrate their true abilities, opportunities for social interaction);
- release of forbidden motives (the inner desire of the child to satisfy his needs in social interaction);
- performance of roles that contribute to the expansion of independence (the ability to demonstrate scenarios that have the functions of "adult life rehearsal");
- reflection of the child's growth, development, maturity (expression of potential physical development, strength, endurance, energy);
- solutions to their problems in playing (with the help of playing, pupils look for solutions to various situations in their everyday life, present their solutions in playing).

Playing is one of those types of children's activities that teachers use for social adaptation of children, teaching them different ways and means of communication. In playing, the child develops as a person, he forms those characteristics of the psyche, which depend on the success of his educational and work activities, his relationships with people. In particular, such a quality of the child's personality as self-regulation of actions is formed in playing. The most important achievement is acquiring a sense of collectivism. It not only characterizes the child's moral views, but also restructures his intellectual sphere, since in a collective playing there is an interaction of different meanings, development of the content of the event and achievement of the general playing goal. It is

proved that in playing, children get their first experience of collective thinking. Scientists believe that children's playing arose spontaneously but naturally as a reflection of the work and social activities of adults (Akhanova, 2018). This is probably the playing's functional capabilities for easy adaptation of children to new, unfamiliar conditions at school lie.

Being an important form of education for the first-graders, playing should be actively included in the organization of the educational process. It is of special importance not only for the formation of the ability to learn and serves as a natural and indispensable means of self-education, self-learning, self-discovery, and self-realization of a child's personality. Playing is also an activity that promotes the maximum realization of a child's potential. And one of the fundamental tasks of the primary level of education is creation of successful social adaptation of the first-graders to school conditions. Successful leadership of the first graders' playing allows each pupil to realize his personal potential as much as possible.

To facilitate the process of social adaptation in working with first-graders at lessons, it is advisable to introduce a system of didactic games aimed at forming mental operations: the ability to analyze, compare, classify, generalize. It is also worth using multi-directional games: role-playing games, construction games, role-playing games with plot elements. When choosing games at the initial stages of working with children, it should be remembered that the didactic one will bring the greatest benefit, because it combines two important elements: education and playing.

For a better social adaptation of primary school pupils to the conditions of the school, the teacher should plan their activities in such a way that the set goal, tasks, game actions and the expected result are clearly outlined before the beginning of the didactic game. When creating a game situation (game design), the teacher should encourage pupils to play, because personal interest on the part of pupils will gradually turn into creative thoughts, feelings for themselves, the team, the whole class team, cognitive activity appears.

The sequence of game actions, preparation of pupils, duration of the game, its control, summing up, explanations by the teacher during playing – all this should be clear, concise and, of course, arouse interest. It is often advisable to show pupils how to do it correctly, effectively, and wittily along with explaining the meaningful features of the game.

It should be noted that the didactic game introduced in primary school is aimed at performing various educational functions important for the first-graders:

- ✓ activation of interest in the educational game (training of pupils' emotional and mental powers);
- ✓ ability to concentrate (to develop the habit of concentrating, working thoughtfully, independently);

- ✓ development of cognitive preferences and abilities (development of physiological capabilities and demonstration of intellectual activity);
- ✓ formation of ingenuity, imagination (ingenuity forms a sense of one's own balance, contributes to establishing an atmosphere of interest and joy from the opportunity to complete a task);
- ✓ training of sensory skills and capabilities (formation and consolidation of a system of sensory standards);
- ✓ consolidation of skills and abilities of interpersonal communication (the most important educational function, the essence of which is mastering the abilities and skills of dialogic speech), acts as a mechanism of social adaptation and a model of motivation for interpersonal communication.

A properly organized and interesting didactic game should be aimed not only at enriching the thinking processes and memory of junior schoolchildren, but also at forming individual feelings, developing self-regulation, training willpower, and encouraging self-development. The didactic game should not be considered only as a means of providing "additional educational services", its value is, first of all, that the game also fulfills the role of emotional relaxation, prevents overtiredness of children, and reduces overexcitement.

Playing is not the only activity that is aimed at developing not only individual abilities, but the ability of the pupil to be creative as a whole. In this case, we can talk about social adaptation as the procedure for including the child in the system of social relations, mastering and working out the norms of behavior, as well as learning the rules of coexistence in new conditions; didactic and dramatic types of games are especially revealing. Let's remind that the motive of playing is not action with objects, but communication between children, which reflects the rules of interaction and relationships between people. When the necessary level of thinking is formed, the child is able to replace the image of another person in order to take on the role and act according to its content. It should be emphasized that the fruitful development of social experience occurs only under the condition of the child's own activity in the process of his educational activity.

In psychology, playing is a meaningful activity, the motive of which is the activity itself. It is not related to need, participation is determined by desire (Skrypchenko, 2019).

Plot-role-playing as a leading type of activity in preschool childhood, affects development of the motivational sphere, visual thinking, internal action plan and the correctness of behavior and activity, and thus determines formation of the main psychological structures of a child of primary school age.

That is why work on the social adaptation of six-year-old children to school conditions should begin with preschool education institutions. The child should be aware of the need to fulfill educational and social requirements and take on the role of a pupil. Educators and psychologists must remember to create conditions for positive social adaptation and further general and intellectual development of the junior schoolchild.

Based on the scientific and theoretical provisions of the problem presented in our work, we have developed an example of the Program for Increasing the Level of Social Adaptation of First-Graders to School Conditions. This Program can be presented as an additional system of organizing the educational process, which will be implemented in the context of specially modeled team games.

The program consists of 5 classes and is designed for 5 weeks (the number of classes and their duration may increase). Game classes should be held in a classroom where you can move freely, they should be conducted according to the principle of social and psychological support for pupils. The duration of games should not exceed one school lesson for first-graders (no more than 30-35 minutes). Classes can be held once a week. During this time, each child will be given the opportunity to present himself, be open and not be afraid of mistakes.

Game lesson 1.

Aim: create a positive emotional background, uniting the class, develop rules of behavior during games.

Games: "The wind blows on ...", "Yes, no, I don't know".

With the words "The wind blows on ..." the teacher starts the game. In order to give the participants of the game the opportunity to learn more about each other, the questions can be as follows: "The wind blows on the one with blond hair", then all the fair-haired people gather in one group. "The wind blows on the one who has a sister", "...who loves animals", "...who likes to draw", "...who has many friends", etc.

After the teacher, children can take turns leading.

Game: "Yes, no, I don't know".

Aim: develop the ability to communicate, to express one's thoughts on one or another issue, to defend one's point of view, to give arguments in favor of one or another answer.

Cards prepared in advance with the answers "yes", "no", "I don't know" are attached to different walls of the classroom before the start of the game.

The teacher (or one of the children in the role of presenter) reads out the questions, and the pupils, having chosen one or another answer, stand against the wall with the appropriate card. The presenter takes turns asking the participants about their choice.

Game lesson 2.

Aim: develop the ability to work harmoniously in a team, group cohesion.

Game: "Typewriter" or, according to the same scenario, the game "Let's make a story".

Participants are prompted for a word or phrase. The letters (words) that make up the text are distributed among the group members. Then the word (phrase) should be said as quickly as possible, and everyone calls their letter (word), and in the intervals between the words, everyone claps their hands.

Game lesson 3.

Aim: relieve tension among participants, self-awareness.

Games: "Magic word", "Magic ball".

Game: "Magic word".

Teacher: when we are worried, we can say a magic word about ourselves, and we will feel a little more confident and calm. It can be different words, for example: "calm", "silence", "gentle coolness" and so on. The main thing is that they help you.

Then the presenter asks what "magic words" each of the participants chose and what they felt.

Game: "Magic Ball".

Aim: improve interpersonal relations in the team.

The participants of the game sit in a circle, the presenter offers, passing each other a ball of woolen thread and winding a part of the thread on the wrist, to say the following: "My name is ... The most in the world I love ... and I don't love ... I want to be friends with..., because ...".

After the participants of the game have spoken, the teacher summarizes: "This magic ball was able to unite us, now we are a real team, we will play together"!

Game lesson 4.

Aim: enhance attention to the behavior of others and the ability to receive feedback.

Games: "Customs", "Associations".

Game: "Customs".

Aim: help the participants of the game learn the language of non-verbal symbols.

Game participants alternately exit and enter the room. Everyone must exit and enter 5 times. At the same time, he must have something hidden under his clothes only once. Other participants of the game try to guess from his behavior where exactly the thing was hidden.

At the end, a discussion is held, the following questions are asked:

- By what signs did you try to find out where the thing was hidden?
- What did you feel when you entered the room?

Game: "Associations".

The teacher emphasizes that the words denoting various abstract concepts should be found with something material, for example, a thing with which they are associated.

Word List: Joy, Faith, Excitement, Security, Anxiety, Sadness, Fear, Dream, Success, Failure, Aspiration, Tenacity, Kindness, Beauty, Abundance, Patience, Illusion, Unity, Loneliness, Love, Inspiration.

- 1. What color do I associate this word with?
- 2. With what form?
- 3. With what texture (hard, soft, rough, smooth, etc.)?
- 4. What natural phenomenon does this word evoke in me?
- 5. With what animal?
- 6. With what plant?
- 7. With what taste and food?
- 8. With what furniture?

Children themselves can continue this list of questions.

Game lesson 5.

Aim: awareness of problems in relationships with people, activation of self-awareness.

Games: "Thank you without words", "Blind guide".

Game: "Thank you without words".

Aim: develop the ability to express gratitude by non-verbal means.

The teacher reminds that in most situations people express gratitude to people with words. And now we will do it without words.

Participants break into pairs and take turns trying to express feelings of gratitude without the help of words.

At the end, a discussion is held, the following questions are asked:

- How did you feel when you performed it?
- Were the thanks sincere or what did it look like?
- Was it clear what feeling the partner was expressing?

Game: "Blind Guide".

Aim: awareness of the motives of interpersonal relations.

The game is played in pairs. In each pair, you should choose a "blind man" and a "guide".

Instructions to "guides": "You lead your partner with you. His eyes are closed. Tell him what's around you".

Participants go in pairs around the room (it is possible to go outside the room). The "guide" leads the "blind" behind him (or supports him behind), tells him about objects, people, and the interior around him. In a few minutes, the participants change roles.

At the end of the game, a discussion is held, during which the game participants tell how they felt in the role of a "guide" and a "blind", whether they were comfortable in these roles, whether they

trusted their partner. Such a game gives rise to many associations, allows to feel firsthand what it means to be dependent.

Let us also emphasize that researchers consider playing as a versatile activity, in particular as an activity related to the development of the human psyche (Skrypchenko, 2019), as an activity of social origin, content and structure (Serheienkova, 2012). Also, playing is a reproduction of human activity, in which it is distinguished by its social, specifically human essence – its tasks and norms of relations between people (Bekh, 2003).

Conclusions. It should be noted that the teacher's work on improving and facilitating the social adaptation of children to school is a very complex and time-consuming process. Therefore, in order to facilitate social adaptation of first-graders to school conditions, we give the following suggestions:

- ✓ formation of a high level of social adaptation involves a combination of playing, creative and productive activities;
- ✓ an emotional positive attitude of the teacher towards pupils is a necessary condition for achieving the effectiveness of their social adaptation;
- ✓ partial use of methods of working with preschoolers in the management of playing and educational activities of six-year-old children;
- ✓ use of the Program to increase the level of social adaptation of first-graders to school conditions during lessons and breaks in order to help children enter the school world faster;
- teaching of the first-graders should be carried out in specially created conditions: organization of the safety mode of being at school, calculation of dosed loads, creation of situations of active interaction, cooperation and communication with the teacher and peers.

REFERENCE

- 1. Akhanova, A. (2018). Game activity as a means of successful adaptation of first-graders to the conditions of learning in primary school. *Pedagogical journal of Volyn*, 2, 16-21.
- 2. Bekh, I. D. (2003). Personality education: In 2 books., Book 2: Personality oriented approach: scientific and practical principles. K.: Lybid.
- 3. Wenger, L. A. (2000). Psychological issues of preparing children to study at school. Kyiv.
- 4. Honcharuk, I. (2013). The teacher's creation of comfortable conditions for the adaptation of first-graders to study at school. *Elementary School*, *7*, 42-44.
- 5. Kocherha, O. (2012). Psychophysiological development of a child before school. *Elementary School*, *1*, 45-47.

- 6. Kravtsov, H. H. (2014). Psychological problems of primary education. Odesa.
- 7. Kryvchikova, O., Liasota, T. (2008). Psychomotor state as a factor in the adaptation of primary school pupils to school conditions. *Physical education, sport and health culture in modern society*, 2, 162-164.
- 8. Krupnyk, H. A. (2014). Peculiarities of psychological support for adaptation of first-graders to the educational process. *Tavriiskyi herald of education*, *2 (46)*, 251-257.
- 9. Kuzmenko, V. U. (2005). Development of the individuality of a child 3-7 years old: Monograph. Kyiv: Drahomanov State University.
- 10. Liubarska, I. (2011). Cooperation of the preschool institution and the family in the context of the preparation of the child to school: monograph, Issue 17. Kyiv.
- 11. Serheienkova, O. P., Stoliarchuk, O. A., Kokhanova, O. P., Pasieka, O. V. (2012). Age psychology. Education manual. K.: Center of educational literature.
- 12. Skrypchenko, O. V., Dolynska, L. V., Ogorodniychuk, Z. V. et al. (2019). Age and pedagogical psychology: teaching manual. Kyiv: Prosvita.

COMMUNICATIVE ACTIVITY AS A MEANS OF FORMING SPEECH COMPETENCE IN PRESCHOOL CHILDREN

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Introduction

The modern preschooler's speech competence formation requires immersion in an active speech environment, in which there are both peers and adults from the immediate environment. Of course, it is necessary to emphasise that these are not only the child's parents and relatives, but also the teachers working with him/her. After all, adults are the very people who play a major role in the child's inclusion in the language environment. Adults create the conditions for the child's personal development, independence, creativity, and the acquisition of experience in cooperative interaction. It is the transfer of information and organisation of joint activities to master it and solve various practical problems that is the main function of an adult. The process of interaction between a child and adults is the basis for the further development of a child's personality. A child learns to listen and understand, to learn new things in the course of communication with adults.

There are contradictions between the urgency of the problem and the peculiarity of partnership interaction and the leading role of an adult in this process of the preschool children's speech competence formation. The socio-cultural mechanism of knowledge transfer works thanks to an adult.

Changing a cognitive paradigm of education to a competence-based one requires reorientation of the education content, selection of new more effective methods and techniques of interaction between participants in the educational process. Communication competence is considered to be one of the prerequisites for successful self-realisation in society. It is the formation of communicative competence in graduates of preschool education institutions that is an important condition for their successful adaptation to learning in the New Ukrainian School and collective interaction. That is why the development of communicative competence is of particular relevance.

1. Formation of communicative competence as a pedagogical problem.

A number of scholars, such as I. Bekh, A. Bohush, N. Havrysh, O. Zaporozhets, T. Pirozhenko and others, have studied the problem of communicative competence development.

The communicative competence of a child as a sphere of revealing the communicative function of speech, in which the free exchange of thoughts and experiences prevails and which is aimed at the future establishment of practical interaction, is actively considered in the researches of

M. Lystopad, K. Krutii, in the fundamental research of T. Pirozhenko and L. Solovyov and many others.

The study of communicative competence is of particular importance in relation to children of senior preschool age. After all, this age is characterised, on the one hand, by the active involvement of a child in group communicative interaction with peers, on the other – by the enrichment of the communication experience with an adult, which contributes to the formation of communicative readiness for schooling and further socialisation. The works of Yu. Bystrova, K. Ostrovska, Y. Prykhodko, L. Rudenko, T. Sak, V. Sinyova, E. Sinyova, L. Fomichova.

Many teachers, such as E. Vereshchagin, V. Kostomarov, I. Levchenko, V. Tkachova talk about the significant difficulties that some children have in composing stories from personal experience, based on one picture and a series of pictures; in retelling works of art and performing creative tasks to continue unfinished stories, etc. This is evidenced by the results of the theoretical problem analysis of preschoolers' communicative competence forming and the experience of practicing teachers. As a result, preschoolers' communicative speech and communicative behaviour are underdeveloped due to the low level of coherent monologue speech.

The scientists H. Kostiuk, S. Maksymenko, V. Mukhina, O. Smirnova and others have studied the impact of communication activity on the mental development of the individual.

Along with external influences (changes in society, lack of purposeful communication training and, at the same time, the presence of a communicative environment with high developmental potential, etc.), internal factors also determine the development of communicative competence. This is, first of all, the self-movement of an individual's natural forces aimed at developing his/her communicative and speech ability and, according to H. Kostiuk, "self-movement and self-development of the personality" in general [1].

2. Interpretation of the concept, pedagogical conditions of formation and criteria of communicative competence formation.

In the Basic Component of Preschool Education of Ukraine, the communicative competence of senior preschool children is interpreted as "the complex use of linguistic and non-linguistic means for communication, communication in specific social and everyday situations, the ability to navigate the communication situation, initiative in communication, restraint in communication; culture of speech communication. The communicative competence implies the formation of all types of speech competence [2].

The competence is a dynamic combination of knowledge, skills, abilities, ways of thinking, attitudes, values, and other personal qualities that determines a person's ability to successfully socialise, conduct professional and/or further educational activities [3].

The Standard emphasises the interconnectedness and interdependence of all components of linguistic competence: phonetic, lexical, grammatical, dialogical, monological. The formation of these skills should be implemented in various forms and types of speech communication. Neglecting any of them can complicate the development of linguistic competence.

Therefore, only an integrated approach to the implementation of all the tasks of speech development makes it possible to successfully achieve the goal of this educational area. And the communicative work orientation on speech development provides children with the opportunity to communicate, obtain information and exchange it, which is extremely important for successful socialisation [4].

The development of children's speech in the new edition of the Basic Component of Preschool Education is rightly presented as one of the main educational areas. Moreover, the emphasis is not on solving individual tasks, but on a holistic approach to the formation of speech competence (in the unity of all its components) as one of the key criteria and at the same time an important condition for the formation of a preschooler's speech personality [4].

According to T. Pirozhenko, communicative development is a prerequisite for the development of a child's personality, the ability to learn cultivated human actions in the process of active interaction with adults and peers. And the child's speech achievements as a reflection of the experience of interpersonal relationships reflect such personally significant psychological phenomena as the status of a child in a family and group of children, the attitude of others to a child [5, p. 22].

The main criterion for the formation of communicative competence M. Eisenbarth defines "the success of a preschool child in interacting with himself/herself and others in a particular communication situation". According to the researcher, the communicative competence of preschool children includes a number of factors: the presence of communicative intentions; adherence to appropriate communication strategies; proper knowledge of the social role and characteristics of the interlocutor; control over the communication process, own behaviour and emotions in this process; availability of skills and abilities to complete communication [6].

We agree that the main factor in the formation of communicative competence is communicative activity, which I. Martynenko interprets as "communication activity, which is important for the socio-psychological normative formation of an individual throughout life, starting from the first year" [7, c. 22].

A. Bohush considers the creation of a developmental speech environment as an important condition for the formation of preschool children's communicative competence, the effectiveness of which is possible if teachers and parents actively use the Ukrainian language in the process of communication. Adults contribute to the development of speech in all forms of the child's activity:

they address him/her in a friendly manner, offer to discuss various events, plans, stimulate the desire to verbalise their life experiences in various activities [8; 203-204].

3. Adults as a leading factor in ensuring children's communication activities.

An important condition for the comprehensive development of a child is his/her communication with adults. Adults are the guardians of the experience, knowledge, skills, culture accumulated by humanity.

Among the many important educational tasks for preschool children in preschool education is teaching their native language and speech development. Teaching speech communication is one of the leading ones. This general task consists of a number of special partial tasks: education of sound speech culture, enrichment, consolidation and activation of vocabulary, improvement of grammatical speech correctness, formation of spoken (dialogic) speech, development of coherent speech, cultivation of interest in artistic words, preparation for literacy.

In preschool institution, children master the most important form of speech communication, namely oral speech. Spoken communication, understanding of addressed speech and active speech itself develop sequentially.

Emotional communication is ahead of the development of the child's speech communication with adults. It is the fundamental, main content of the relationship between an adult and a child in the preparatory period of speech development – in the first year of life. A child responds with a smile to an adult's smile, makes sounds in response to a gentle conversation with him/her. It is as if a child is infected by the emotional state of the adult, his or her smile, laughter, and gentle tone of voice. This is emotional communication, not speech, because it lays the foundations for future speech, future communication through words that the child understands and consciously pronounces.

Ideally, an educator is one of the most important adults for a preschool child. Approving or disapproving statements about the child's actions and speech exercises play an important role in the development of a preschool child. That is why it is extremely valuable for the educator to follow the rule "every opinion has the right to exist". It is equally important to create a friendly, positive atmosphere for the child to prove his or her own position and to develop a strong desire for interaction and communication.

In the course of ensuring the communication activity of each child, it is appropriate to look that during each subsequent task, children have the opportunity to interact in other subgroups each time and to elect a new leader.

The development of preschool children's communicative skills in joint speech partnerships in "child-adult activities" requires clear forms of organising such activities in the process of forming communicative competence. Through communication with adults, a child learns to listen and

understand, to learn new things. Such experience is acquired in the course of communication, which is realised in play, intellectual search and joint work.

The formation of preschoolers' speech competence takes place in various activities based on the priority of the activity approach proclaimed in the updated version of the BCPE. Among them, an important place is given to educational and speech activities.

Teaching and speaking activities are implemented in specially organised classes on speech development (individual, subgroup and general group). The purpose of such activities is the purposeful formation of phonetic, lexical and grammatical skills necessary for full communication and composing various types of coherent statements such as description, reporting, reasoning, explanation, proof, etc. Language and speech for children in educational and speech activities are not only a tool of cognition and communication, but also a subject of observation, elementary research and exercise.

H. Havrysh also notes that the most effective for speech development are such activities as speech and game, communicative speech, artistic speech.

Let us consider them in more detail.

Speech and game activities involve children using previously acquired knowledge, speech skills and abilities in new connections and circumstances. Playful activities in preschool childhood are leading and are based solely on the children's interest in the game, its rules and actions. Speech and play activities are primarily aimed at developing and improving children's speech. It covers speech content and provides support for didactic, folk, and outdoor games with texts and dialogues, game exercises, surprises, fun, and game communication situations in which a child acts as an active speaker.

During the game, a child does not notice the learning process, easily remembers new words, describes his or her actions, which contributes to the acquisition of speech. Children's games vividly reflect the interconnection of the national culture of a people and its language, the unity of cognition, communication and activity of children, which is the essence of this type of activity.

Communicative and speech activity directly affects the formation of children's speech, as it takes place in the process of their speech interaction in the systems "teacher – child", "children – teacher", "children – children", "child – children"; provides for the establishment and maintenance of contacts with other speakers in the process of direct communication (exchange of information, experience, skills, abilities, results of activity).

Communicative and speech activities are inseparable from play, artistic, cognitive, research and other activities, in which situations constantly arise that require emotional and speech response, acceptance of a certain role. Involving a child in various forms of communication (addressing, drawing attention to oneself or to something else, formulating a question, answering a question,

requesting, commenting, offering, refusing, thanking, predicting, etc) depends on the purpose, content, and means of activity.

The artistic and speech activities of preschool children cover a wide range of artistic activities, the core of which is speech. Firstly, this term refers to a specific type of activity related to the perception, understanding, and reproduction of the artistic works' content by children in various types of games and theatrical performances. At the same time, it is an artistic and creative activity (musical, visual, theatricalisation of short literary works) accompanied by figurative speech [4].

Of course, not all practitioners can immediately implement a communicative approach to the development of children's speech. Many organisational issues remain to be resolved. A teacher needs professional knowledge of designing personal developmental interaction as a system, which includes psychological and pedagogical diagnostics; setting pedagogical tasks; organising pupils' activities; analysing the dynamics and levels of their activity, as well as developmental correction; forecasting educational situations of intersubjective interaction [9].

It is also worth drawing attention to the role of parents in the formation of the child's speech and communication competences. It is not for nothing that the BCPE reveals the participation of parents in the development of the child's competences, the involvement of parents and families in the educational process of preschool education institution affirms the position that each parent of a child is responsible for his/her upbringing, development and education, for the preservation of his/her life, health promotion, formation of a sense of human dignity and conscious attitude of the child to a healthy lifestyle. The fact that a child receives preschool education in an educational institution or other educational entity does not relieve parents of the obligation to care for, take care of, educate, develop and train their child [3].

Conclusions

This study highlights an urgent problem of modern preschool education – the formation of preschool children's communicative competence. Communicative activity is presented as a means of forming speech competence. The concept content of communicative competence, speech competence, communicative activity is revealed. The importance of organising partnership interaction in the educational process of a modern preschool educational institution is emphasised. The pedagogical conditions for creating a developmental environment that would ensure the development of speech and the formation of speech competence in the process of communication activity are described.

The role of teachers and parents is determined to be crucial in the organisation of speech activity, in the formation of communicative skills that result in the formation of preschool children's speech competence.

Further theoretical and practical research is needed on the issue of developing methodological and didactic materials to ensure the formation of preschool children's communicative competence not only in the conditions of preschool education institutions but also in the family.

REFERENCES

- 1. Korniaka, O.M. (2010) Development of communicative competence of the individual in the modern socio-communicative space. *K.: SE 'Information and Analytical Agency'*. 1, 140 145.
 - 2. Basic component of preschool education. Preschool education. 2012. № 7. 26 c.
- 3. The basic component of preschool education (State Standard of Preschool Education) (new edition) of 12.01.2021. № 33. URL: https://mon.gov.ua/storage/app/media/rizne/2021/12.01/Pro_novu_redaktsiyu%20Bazovoho%20ko mponenta% 20doshkilnoyi% 20osvity.Pdf (accessed 28.05.24).
- 4. Havrysh, N. (2021) Implementing the Basic Component of Preschool Education (new edition). *Preschool education*. 3, 3-8.
- 5. Pirozhenko, T.O. (2010) Communicative and speech development of the preschooler. Ternopil: Mandrivets.
- 6. Aizenbart, M. (2014) Game activity in the context of social and communicative skills of senior preschoolers. *Topical issues of the humanities: a collection of scientific papers*. 9, 68-73.
- 7. Martynenko, I.V. (2013) Features of interpersonal communication in children with normal and impaired speech development. *Correctional Pedagogy and Special Psychology. Collection of scientific papers*. 24, 320-324.
 - 8. Bohush, A.M.(1986) Classes on speech development in kindergarten. Kyiv: Rad. shk.
 - 9. Pirozhenko, T.O. (1999) Speech growth of the preschooler. Kyiv: Hrailik.

PSYCHOLOGICAL WELL-BEING AS A FACTOR OF STUDENTS' EDUCATIONAL SUCCESS IN HIGHER EDUCATION INSTITUTIONS

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Summary

On the basis of the conducted research, the concept of "psychological well-being" of the individual in the constructs of foreign and national scientists is analyzed. It is presented that the psychological well-being of an individual is an integral dynamic formation. It is based on a relatively established, integral subjective experience of a person's satisfaction with one's own life, a reflective position of an individual regarding the evaluation of personal life path. Psychological well-being is an integral indicator of a person's orientation towards effective functioning and self-realization. It was determined that the effective organization of the educational process of the higher education institution, where the future specialist is trained, is currently based on the implementation of innovative pedagogical technologies - in particular, information-communication, training technologies, contextual learning technologies. This contributes to the formation of the professional competence of students, the development of professional motivation, and the necessary professional qualities. Students become aware of their own potential. Desire for professional achievements, selfrealization, and self-affirmation are formed. All these are components of psychological well-being that affect the academic success of students in higher education institutions. It was determined that young people's awareness and understanding of the components of psychological well-being is the factor that contributes to the understanding of the need to take care of one's own mental health, contributes to positive changes in the evaluation of one's own life.

Key words: psychological well-being, subjective well-being, components of psychological well-being, mental health, happiness, life satisfaction, quality of life.

Introduction

Modern society is in a dynamic process of transformation, and the requirements for a specialist in professional activity are becoming more complicated. A person's psychological well-being is an integrative personal formation that plays an important role in the process of professional training of young people, as it is a psychological resource for the success of the professional competence formation of a future specialist. The researchers note that the student period of life, which is

traditionally associated with youth, is characterized by the need to mobilize all personal resources, which, today, is connected with the difficulty of studying for students of higher education institutions of Ukraine in the conditions of military operations.

Psychological well-being is that integrative function of the individual that becomes a psychological resource of both young people and representatives of mature age in the process of professional training. The task of administration representatives, professors and teaching staff, specialists of the services of the institution of higher education is to create effective conditions of an educational environment for the formation of a competent graduate, ready to solve complex social problems. Today, in many institutions of higher education in Ukraine, education is carried out in a distance or mixed form. The introduction of interactive, in particular, training technologies, information-communication technologies, contextual learning technologies into the educational process of higher education institutions ensures the formation of a competent specialist in the conditions of distance learning. Peculiarities of the educational process organization in a higher education institution and its influence on the development of the components of students' psychological well-being remain an urgent issue today. The psychological well-being of future specialists reflects a subjective feeling of general satisfaction with life, the desire for self-development, the desire for professional achievements, success and, thus, becomes one of the factors of the success of students in higher education institutions.

Purpose, subject and research methods

The purpose of the article is the theoretical analysis of research on the problem of psychological well-being of the individual, in particular, of students of higher education institutions. The subject of the study is psychological well-being as a factor in the success of students in higher education institutions. To achieve the purpose, the following methods were used: complex analysis, theoretical analysis of sources, systematization of modern research data.

Research results

The emergence of the concept of "psychological well-being" is related to the study of the state of optimal positive human functioning. According to the research of L. Z. Serdiuk, the desire for full functioning and experiencing the feeling of well-being is the main driving force of personal growth [5, p. 7]. Psychological well-being is an important condition for a person's life quality. Studying the components of this feeling and its support is the subject of many psychological studies.

The term "psychological well-being" was introduced into scientific circulation by N. M. Bradburn, who understood by this term a subjective feeling of happiness and general satisfaction with life. At the end of the 60s of the 20th century, this researcher developed an intensity scale of experiencing happiness. The purpose of research during this period was to identify the interdependence of indicators of positive and people's negative experiences in various life situations, the influence of various factors on life satisfaction in general. Later, it was found that what was determined could not provide a complete subjective picture of the perception of the life situation as a factor of a person's psychological well-being.

Psychological well-being is one of the key elements of a person's existence, a criterion for the quality of one's life. Issues of psychological well-being are also studied by health psychology researchers. It is believed that well-being itself is determined by self-esteem and a sense of social belonging, which is connected with the realization of the entire spectrum of human capabilities [5, p. 7].

Today, according to the results of research, the basis of psychological well-being is a person's mental health. In the studies of H. Cantril, E. Diener, N. Bradburn, and M. Yagoda, human well-being was associated with mental health and the feeling of happiness. It is psychological well-being that ensures the realization of a human's personal potential, overcoming difficulties, and productive activity. Mental balance, adaptive abilities of a person, his ability to change his behavior in accordance with changes in the surrounding environment are the criteria of mental health defined by these researchers. Also, the criteria of mental health are the acceptance of ethical norms of the group, a sense of attachment to close people and a sense of responsibility for them, the ability to implement life plans. Researchers R. M. Ryan and E. L. Deci determined the connection between psychological well-being and physical health. This is due to the fact that as a result of diseases there are restrictions that affect life satisfaction: a person can lose autonomy, relationships with others. The concept of "psychological well-being" is associated with such concepts as physical and mental health, subjective well-being, a sense of happiness, psycho-emotional comfort, and life satisfaction.

In the studies of C. Ryff, S. Lyubomirsky and others the theoretical foundations of the phenomenon of psychological well-being and its importance in the process of self-realization of the individual are presented. These researchers studied the phenomenon of subjective well-being and its components, such as human satisfaction with life, happiness, and psychological health.

Problems of human psychological well-being are the subject of research in such psychological directions as the theory of self-efficacy (A. Bandura), the theory of self-actualization (A. Maslow), etc. According to the theory of self-determination (R. M. Ryan, E. L. Deci), satisfaction of basic human needs, such as competence, autonomy (self-determination), positive interpersonal

relationships, are connected by researchers with social factors. Satisfying the specified needs contributes to increasing the level of well-being and life potential of a person.

Nowadays, two main approaches to understanding the concept of "psychological well-being" are distinguished: hedonistic and eudaemonistic. The first direction includes the concepts of such researchers as N. M. Bradburn, E. Diner, S. Oishi, R. E. Lucas, A. S. Waterman, and others. Psychological well-being is considered as a state of a person, the occurrence of which is connected with the satisfaction or dissatisfaction of a person's own needs. According to N. M. Bradburn's model of psychological well-being, the basis is balance as an interaction of positive and negative emotional experiences. Events of everyday life accumulate in the form of positive or negative emotions (affects). The difference between them is an indicator of psychological well-being, a person's sense of satisfaction with life. People with positive emotional experiences of life events have a higher level of life satisfaction.

The concept with which the concept of "psychological well-being" is often associated is the concept of "subjective well-being", which was introduced by E. Diener within the framework of the hedonistic approach. This concept characterized everyday emotional pleasant and unpleasant experiences of different frequency and intensity for a person. Satisfaction with life was considered by the researcher as a cognitive process – the result of a general assessment of one's own life based on reflections on it [7, p. 154]. According to the hedonistic approach, well-being is a feature of the individual attitude of a person to himself as a result of the satisfaction or dissatisfaction of needs and the ability to adapt to the social community in order to restore one's own functional state [7, p. 151].

Eudaemonistic models of psychological well-being contain more components and differ in content. This approach assumes that psychological well-being is the result of individual self-development. This approach includes the concepts of such researchers as C. Ryff, E. L. Deci, R. M. Ryan. A person transforms himself and, accordingly, transforms the surrounding world, thus achieving inner harmony [3, p. 49].

The researcher C. Ryff, based on the analysis of the provisions of the psychological theories of A. Maslow, W. A. Gordon, C. Rogers, R. Neugarten, E. H. Erikson, R. Neugarten regarding the positive functioning of the individual, developed a multifactor structure of psychological well-being. This structure is based on the following components:

- a person's positive attitude towards oneself and one's own past;
- presence of life meanings, goals, passions;
- the ability to perform tasks of everyday life;
- constant development, self-realization;
- trusting and caring relationships with other people;
- adherence to one's own beliefs.

According to the proposed model, psychological well-being is the result of a person revealing one's own creative potential, self-realization. Based on the results of the research, the researcher developed the questionnaire "Scale of psychological well-being" and the method of psychotherapy well-being therapy [3, p. 49].

According to the theory of self-determination developed by researchers E. L. Deci, R. M. Ryan, the level of personal well-being is related to the realization of the basic psychological needs of an individual: the need for autonomy, connections with others, competence. This model examines the factors that stimulate the potential of the individual, which is manifested in growth, integration, and health. Also, the conditions that contribute to the development and effective functioning of both the person and groups are investigated.

Separate approaches presented by researchers S. Lyubomirsky, H. S. Lepper, M. P. Seligman include research on quality of life, and psychological well-being is related to physical, psychological, and social aspects of human functioning. In the studies of M. Harari, K. Wehler, B. Palombi, L. Roscoe, etc., the so-called "health" approach ("Wellness") is implemented, which is built on a healthy lifestyle, physical and spiritual health.

According to the analysis of modern researchers, hedonistic and eudaemonistic approaches have conceptual differences regarding the vital activity of an individual. The first describes how the conditions of the social environment determine the evaluation of the content of human existence through the satisfaction or dissatisfaction of needs. Researchers of the second focus on the personal-psychological aspect as a system of factors of the psychological person's well-being.

According to the studies of contemporaries, in particular - L. Z. Serdiuk, researchers of psychological well-being define it as a concept that expresses a person's attitude towards own personality, life and is characterized by a feeling of satisfaction. Psychological well-being is based on two basic components: the dominance of positive emotions over negative ones, a positive assessment of one's own life. Accordingly, it is possible to distinguish two interrelated components of psychological well-being. The first is a cognitive component in which a person evaluates various aspects of life. The second is emotional, which is characterized by the emotional coloring of the attitude to certain aspects.

Among the factors of psychological well-being identified by researchers: those that researchers associate with individual psychological characteristics of a person, in particular, – extroversion, emotional stability; the level of academic success; personal achievements [5, p. 10].

A person's psychological well-being, according to research by R. Gilman and E. S. Huebner, also depends on life circumstances, in particular, social support. Among the socio-psychological factors of psychological well-being, researchers K. Joronen, K. Astedt-Kurki singled out such things as safety, comfort of life, an atmosphere of love – family joys, harmony in family communication

and interaction; openness, trust in interpersonal relations; inclusion of parents in children's lives; a person's sense of importance in the family; family support of relationships with other people, activities outside the family [5, p. 11].

According to the model of psychological well-being of the Ukrainian researcher O. Hryniv, a conventional coordinate system with two main dimensions with diametrically opposite parameters was formed. The first is the preservation of balance, which is characterized by peace, harmony and development (movement, dynamics, realization). The second is subjective experiences of satisfaction or "dissatisfaction with life and objective achievements (life success)". The researcher considers psychological well-being as a relatively stable and integral subjective experience. The basis of such an experience is a reflective position of a person, an analysis of a life path.

National psychology is characterized by the analysis of psychological well-being from the perspective of the concepts of life activity, life creativity. According to T. Tytarenko's research, psychological well-being is associated with experiencing the ability to change and create one's own life, to gain experience in new areas of the unpredictable and unexpected. Thus, psychological well-being is associated with the desire and availability of resources to create new things, try out the unfamiliar, improvise, however, responsibly, avoiding destructive consequences.

According to L. Dzhabbarova's research, psychological well-being is associated with civic identity and with individual components of this concept: identification with an ethnic group, satisfaction with national belonging [1, p. 11]. According to the studies of psychological well-being during the pandemic conducted by H. Yurchynska and K. Hruzynova, the following groups of research participants were selected. The first group consisted of people for whom the quarantine had a negative impact on their quality of life. The second included people who recognized the positive impact of quarantine on life. The third group consisted of people whose lives were not affected by the restrictions associated with the quarantine. The indicators of well-being were the highest among the representatives of the second group. At the same time, management of the environment, selfacceptance, as components of psychological well-being, turned out to be the highest among the representatives of the third group. Thus, the complex conditions of modern life create certain incentives for the development of the psychological well-being of the youth of Ukraine [4, p. 328]. The results of research by H. Yurchynska and K. Hruzynova indicate that both in the "covid" period and at the beginning of the martial law in Ukraine, the most important resource of students of educational institutions is self-efficacy, the desire for self-development, self-realization, growth in self-knowledge, and the desire for self-improvement [4, p. 337]

According to the results of the research of I. V. Yavorska-Vietrova, a factor in a person's psychological well-being is the peculiarities of the individual's self-attribution. The present time requires initiative, activation of personal resources of young people, however, the lack of self-aware

knowledge of the components of one's own "Self" as a potential of opportunities leads to a contradictory self-attitude, negatively affects the meaningful dimension of life, and, accordingly, - the psychological well-being of a person. Positive self-image is one of the most important psychological tasks of youth, affecting the development of all new personality formations at this age [8, p. 187].

A person's reflective attitude towards oneself is a reflection of attitude towards oneself as a subject of activity, one's own behavior, which is related to life goals, activity tasks, value orientations, attitudes. Self-attitude performs the function of control and self-regulation, affects the process of forming a meaningful vector of life space, which is manifested in social activity and in the internal personal activity of an individual [9, p. 79].

The results of the study of the relationship between the system of self-attitude and the psychological well-being of the individual, presented by I. V. Yavorska-Vietrova, show the following. An analysis of the characteristics of persons' self-image with a high level of psychological well-being shows that they have unconditional faith in their own abilities, they are energetic, and have a positive self-esteem. They are characterized by self-approval as a whole. Interest in one's own personality and self-respect are most pronounced in the structure of self-attribution of these persons. The least pronounced are the peculiarities of the attitude of others towards them, self-blame. They demonstrate confidence in their own curiosity for others, self-satisfaction. The analysis results of the characteristics of the persons' self-attribution with a low level of psychological well-being indicated the following. The research participants demonstrated a general positive attitude towards themselves, readiness for self-discovery, however, they had doubts about the value of their own "Self" for others, the interest of their own "Self" for others, they expect a negative assessment of their activities. Also, subjects with low indicators of psychological well-being showed average indicators of self-blame, low indicators of self-understanding. This indicates insufficient development of self-reflexivity, the presence of negative emotions towards oneself. Also, this is a sign of the tendency to feel guilty for one's own mistakes, i.e., the conflict of self-attribution [9, p. 79].

According to the theoretical investigations of L. Z. Serdiuk, researchers understand psychological well-being as a systemic quality of a person that is acquired in the process of life, manifested in the experience of the fullness of life, its value, and is a condition for the realization of human abilities. Psychological well-being is a construct that reflects all aspects of an individual's life. The structure of psychological well-being includes personal growth, life values, positive relationships with others, life goals and the ability to effectively implement them, developed self-acceptance, the ability to establish and maintain trusting relationships. The researchers also refer to the structure of psychological well-being: personal aspirations of a person, future perspective, systems of attitudes

towards oneself and others, self-efficacy, motivation, self-realization, understanding of personal potential, conscious control, evaluation of one's own achievements, inclusion in social life [5, p. 11].

According to the researches of M. T. Dryhus, personal effectiveness is among the factors of psychological well-being. It is based on A. Bandura's concept of self-efficacy. To characterize the semantic space of the concept "self-efficacy", the scientist used such constructs as personal effectiveness, the strength of a person's confidence in one's own effectiveness, a sense of personal effectiveness [2, p. 33]. Self-efficacy is among the factors of psychological well-being of student youth presented in L. Z. Serdiuk's research. It is the youth age that is sensitive in terms of the productivity of self-development for the purpose of self-determination of the individual as a component of his psychological well-being [2].

According to L. V. Dzhabbarova's research, the psychological well-being of students is an integral set of their psychological properties determined by external and internal factors that contribute to the positive functioning of a person during professional training. The structure of psychological well-being of students is an integral formation of such components.

- 1. Gnoseological knowledge of the essence and characteristics of psychological well-being, as well as knowledge of the features of the future profession.
- 2. Motivational the specifics of motives that influence a person's orientation. The researcher singles out the desire to achieve a life goal, the desire for achievements in professional activity.
- 3. Affective a set of emotional attitudes towards oneself and the environment, for students of educational institutions towards the educational environment.
- 4. Valuable a system of personal and professional values. Awareness of the importance of professional self-actualization.
- 5. Conative a set of skills and abilities that allow effective implementation of activities. Ability to self-development, independence, management of the environment.

According to the results of L.V. Dzhabbarova's research, a high level of psychological well-being is determined in students who are psychologically literate – knowledgeable about the facts and regularities of mental life, have a life goal and strive to achieve it, aimed at achieving success in future professional activities, have a positive attitude as towards themselves and the surrounding environment, realize the meaning of life, are independent, understand the necessity and strive for self-development, are capable of organizing the social environment [1, p. 14].

The effectiveness of student's learning depends on the organization of the educational process, in particular, the implementation of training, information-communication technologies, contextual learning technologies, the implementation of interactive methods – discussions and debates, didactic games, trainings, analysis of problem situations, projects. The effectiveness of distance learning

depends on the specifics of the combination of individual and group forms of work, student participation in scientific conferences, seminars, and round tables. This contributes to the development of motivation, orientation, and the desire for professional achievements – and, accordingly, affects the success of studies. Taking into account the age and personal characteristics of students, active subject-subject interaction with teachers, curators of academic groups, representatives of the administration and various services of the institution of higher education, the organization of group forms of student interaction affects the development of the components of psychological well-being of students of higher education. Satisfaction of basic needs, support of the social environment, realization of personal aspirations, assessment of self-efficacy, opportunities for self-realization, awareness of one's own potential, inclusion in social life – these components of psychological well-being depend on the atmosphere of cooperation, support for manifestations of creative initiative of students while studying at a higher education institution.

Psychological well-being is an integral indicator of a person's orientation towards the implementation of effective functioning, self-realization, which is expressed in self-satisfaction, one's own life, subjective experience of happiness. Psychological well-being is a dynamic formation, the level of expression of which is influenced by the coherence of a person's past, present and future prospects, system of attitudes (values), life prospects – goals, plans, aspirations. Psychological well-being is the psychological basis of personal safety, as it is a self-regulatory function of preserving the integrity of the individual, its stability as a psychological system. Psychological well-being is the potential for the realization of a person's internal resources for the realization of one's own opportunities and life prospects.

Conclusions

According to the results of the conducted research, it was determined that psychological well-being is considered by researchers as a complex dynamic formation containing:

- psychophysiological, cognitive, individual-psychological, emotional and value-motivational components of the personality structure;
- peculiarities of the social situation of development, psychological neoplasms, leading type of activity typical for a certain age.

Psychological well-being is a specific experience of happiness, which is accompanied by a positive emotional background, characterized by the satisfaction of the system of needs, a person's awareness of the meaning of being. Researchers believe that a person's mental health affects the overall level of psychological well-being. Thus, psychological well-being is manifested in the positive functioning of a person, expressed in life satisfaction.

The effective organization of the educational process of a higher education institution, in particular, in the conditions of distance or mixed form of education, is based on the implementation of information-communication, training technologies, contextual learning technologies. This contributes to the students' productive mastery of the system of professional knowledge, skills and abilities, the possibilities of their practical implementation, the development of professional motivation, the necessary professional qualities, and the desire for continuous professional self-development. Accordingly, basic needs are met, the young person feels supported by the social environment, understands the possibilities of realizing personal aspirations, realizes one's own potential, inclusion in social life. Students develop a desire for professional achievements, a desire for self-realization. All these are components of psychological well-being that affect the academic success of students in higher education institutions.

Psychological well-being is determined by the features of personal development, orientation, and the presence of a person's life goal. What is determined provides opportunities for self-realization, awareness of personal individuality. Consistency of values, goals, motives of the individual and the social environment – educational institutions, professional groups, labor teams – is a condition and manifestation of psychological well-being. According to the research, young people's awareness and understanding of the components of psychological well-being is the factor that contributes to the understanding of the need to pay more attention to one's own mental health, to timely turn to specialists when mental health problems arise, and is a factor in positive changes in life assessments.

REFERENCE

- 1. Dzhabbarova L. V. Doslidzhennia struktury psykholohichnoho blahopoluchchia studentskoi molodi. Teoriia i praktyka suchasnoi psykholohii. 2018. №1. S. 10 15. URL: http://tpsp-journal.kpu.zp.ua/archive/1_2018/4.pdf [in Ukrainian].
- 2. Dryhus M. T. Osobystisna efektyvnist chk chynnyk psykholohichnoho blahopoluchchia. Samodeterminatsiia psykholohichnoho blahopoluchchia osobystosti: monohrafiia / L. Z. Serdiuk, I. V. Danyliuk, V. V. Turban, O. I. Penkova, N. D. Volodarska [ta in.]; za red. L. Z. Serdiuk. Kyiv Lviv : Vydavets Viktoriia Kundelska, 2021. S. 30 34. URL: https://lib.iitta.gov.ua/729023/3/Serdjuk_Monography.pdf [in Ukrainian].
- 3. Karhina N. V. Osnovni pidkhody do vyvchennia psykholohichnoho blahopoluchchia osobystosti: teoretychnyi aspekt. Psykholohiia. Nauka i osvita. 2015. №3. S. 49 55. URL: https://scienceandeducation.pdpu.edu.ua/doc/2015/JRN_3/PDF/10.pdf [in Ukrainian].

- 4. Saveliuk N. Psykholohichne blahopoluchchia studentskoi molodi: porivnialnyi analiz u kovidnomu i voiennomu kontekstakh. Psychological Prospects Journal. Vyp. 39. 2022. S. 322 340. DOI: https://doi.org/10.29038/2227-1376-2022-39-sav
- 5. Serdiuk L. Z. Analiz osnovnykh teoretychnykh pidkhodiv do rozuminnia zmistu ta struktury fenomena psykholohichnoho blahopoluchchia osobystosti. Samodeterminatsiia psykholohichnoho blahopoluchchia osobystosti: monohrafiia / L. Z. Serdiuk, I. V. Danyliuk, V. V. Turban, O. I. Penkova, N. D. Volodarska [ta in.]; za red. L. Z. Serdiuk. Kyiv – Lviv: Vydavets 7 2021. S. 12. Viktoriia Kundelska, URL: https://lib.iitta.gov.ua/729023/3/Serdjuk_Monography.pdf [in Ukrainian].
- 6. Serdiuk L. Z. Osobystisna samorealizatsiia ta psykholohichne blahopoluchchia yak osnovni stratehichni linii motyvatsii uchinnia studentiv VNZ. Naukovyi visnyk Chernivetskoho universytetu. Pedahohika ta psykholohiia. Chernivtsi: Chernivetskyi nats. u-t. 2014. Vyp. 687. S. 151-159. URL: https://vmurol.uu.edu.ua/upload/publikatsii/nauka/pdf_2014/Osobistisna_samorealiz_serdyuk.pdf [in Ukrainian].
- 7. Kharytynskyi A. Psykholohichnyi zmist poniattia subiektyvnoho blahopoluchchia osobystosti Orhanizatsiina psykholohiia. Ekonomichna psykholohiia. 2022. 3 (27). S. 149-159. URL: https://doi.org/10.31108/2.2022.3.27.15 [in Ukrainian].
- 8. Khomenko Ya. V. Empirychne doslidzhennia strukturnykh komponentiv samostavlennia v osib yunatskoho viku. Naukovi zapysky. Natsionalnoho universytetu «Ostrozka akademiia» Seriia «Psykholohiia» / red. kol. : I. D. Pasichnyk, R. V. Kalamazh, L. V. Zasiekina ta in. Ostroh : Vydavnytstvo Natsionalnoho universytetu «Ostrozka akademiia», 2017. Vyp. 5. S. 186 201. DOI: 10.25264/2415-7384-2017-5-186-201
- 9. Iavorska Vietrova I. V. Vzaiemozviazok systemy stavlen ta psykholohichnoho blahopoluchchia osobystosti: Samodeterminatsiia psykholohichnoho blahopoluchchia osobystosti: monohrafiia / L. Z. Serdiuk, I. V. Danyliuk, V. V. Turban, O. I. Penkova, N. D. Volodarska [ta in.]; za red. L. Z. Serdiuk. Kyiv Lviv: Vydavets Viktoriia Kundelska, 2021. S. 71 98. URL: https://lib.iitta.gov.ua/729023/3/Serdjuk_Monography.pdf [in Ukrainian].

PECULIARITIES OF SOCIAL DEVELOPMENT OF OLDER PRESCHOOL CHILDREN WITH SPEECH DISORDERS: SPECIFICS OF SOCIAL FORMATION OF OLDER PRESCHOOL CHILDREN WITH SPEECH IMPAIRMENTS

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Summary

The article is devoted to the study of the peculiarities of social development of older preschool children with general speech underdevelopment (GSU). The specifics of the social development of these children are analyzed, taking into account their communicative difficulties and the impact of speech impairments on social interaction. The factors that contribute to or hinder successful socialization are considered, including the role of family, educators, and specialized teachers. The article also highlights methods of correctional work aimed at improving speech skills and social adaptation. Practical recommendations are provided for creating optimal conditions for the harmonious development and integration of children with GSU into society. Special attention is paid to interpersonal interactions in the children's group and the formation of emotional-value relationships. The results of studies indicating the positive impact of specialized programs and an individual approach to each child, taking into account their characteristics, are analyzed. It was found that children with GSU often have problems establishing contacts with peers, which can lead to isolation and low self-esteem. The importance of integrating correctional work into the child's daily life is emphasized. The use of games and interactive techniques to stimulate social activity is suggested. Examples of successful socialization based on cooperation with speech therapists and psychologists are considered. The prospects for further research in this field are identified, particularly regarding the impact of digital technologies on the correctional process. The article provides valuable information for educators, parents, and specialists working with children with GSU. Thus, successful socialization of older preschool children with GSU requires a comprehensive approach that combines correctional and developmental activities with active support from family and educators. It is important to create a favorable environment that stimulates speech development and social interaction. Further research should focus on improving correctional work methods and using innovative technologies to improve social adaptation outcomes. Cooperation between parents, educators, and specialists is a key factor in ensuring the successful social development of children with GSU. Early diagnosis of speech impairments is particularly important, as it allows for timely initiation of correctional work. The use of integration approaches in the educational process helps children with GSU better adapt to the conditions of kindergarten and school. A positive emotional climate in the group fosters the development of children's communication and collaboration skills. For effective development of speech and social skills, it is advisable to implement individual and group activities. Regular monitoring of children's progress allows for adjusting the development program according to their needs and abilities. Involving parents in the correction process and their active participation in specialized activities is an integral part of successful socialization. Thus, a comprehensive approach and coordinated work of all participants in the process provide children with GSU with optimal conditions for harmonious development and integration into society.

Key words: social development, preschool age, general speech underdevelopment, socialization, communicative difficulties, correctional work, speech impairments, emotional-value relationships, individual approach, interactive techniques.

Introduction

The social development of older preschool children with general speech impairments is a complex process that requires attention and thorough study. Unlike their peers with normal speech, these children face unique challenges in their social development. The main problem for them is limited access to communication with others due to limited or unclear speech. This can lead to isolation and a feeling of inadequacy in interacting with other children. By studying this topic, we can better understand how to help these children overcome social obstacles. The development of social skills in this group of children requires an individual approach and specialized support. It is important to create a favorable environment where they can develop communication skills and establish contacts with others.

In addition, the study of this topic opens up new opportunities for the development of innovative pedagogical approaches. Considering the specifics of the social development of older preschool children with general speech underdevelopment, programs and methods can be created aimed at enhancing their social competencies. This is of great importance for their further successful performance of social roles in the future. It should be noted that an additional aspect of the importance of studying this topic is raising awareness among pedagogical and parental communities about the needs and capabilities of children with speech disorders. Understanding the peculiarities of social development of these children helps reduce stigmatization and promotes the creation of an inclusive environment where every child has the opportunity to develop at their own level.

The study of this topic points to the need for further intervention programs and resources to support the social development of older preschool children with general speech impairment.

Interactive games, group activities for emotional development, and communication support can be effective tools in this process.

Thus, the importance and relevance of the outlined topic lies in the need to understand and support the social development of older preschool children with speech impairments. This helps create favorable conditions for their inclusion in society, the development of social skills, and preparation for successful performance of social roles in the future. Understanding these aspects also contributes to raising awareness among pedagogical and parental communities about the needs of this group of children and promotes the creation of an inclusive environment where every child has the opportunity to develop at their own level. In addition, the study of this topic paves the way for further innovations in the field of education and preschool pedagogy. The development of specialized programs and methods will contribute to a more effective solution of the problems of social development of children with speech impairments, as well as improve their chances of successful adaptation in modern society.

In general, the development of social skills in older preschool children with speech impairments is an urgent and important task for modern society. Increasing attention to this problem will contribute to building a more inclusive and tolerant society where every child will have the opportunity to develop comprehensively and achieve their potential regardless of developmental difficulties.

Today, the problem of speech formation in older preschool children is one of the leading tasks in both pedagogy and psychology, since the degree of speech development of a pupil determines the level of formation of social and cognitive achievements of the child, the ability to express themselves and acquire other knowledge. The solution of such problems of children's speech competence should be carried out in the process of their daily communication with educators, parents and peers, integrating into various activities. An analysis of recent research and publications shows an active interest of scientists in the problem of speech development of older preschool children. Researchers are studying various aspects of this problem, in particular: researcher A. Bogush considers the formation of speech competence of children taking into account their individual characteristics. This approach involves the individual development of each child, taking into account their needs and capabilities. Research, such as those conducted by G. Leushina, T. Pirozhenko and others, help identify effective methods of working with older preschool children with different levels of speech development. The relationship between speech development and social adaptation of children was the subject of study by N. Havrysh, M. Vashulenko. The peculiarities of social competence and general social development of older preschool children with general speech underdevelopment were the object of study of many modern Ukrainian researchers. Thus, in their works, this issue was considered by: O. Groza, Yu. Ribtsun, O. Gryn'ova, O. Milevs'ka, Yu. Dmytriv, B. Andrejko, A. Fastovets', A. Simko, T. Chechko, L. Ishchenko, O. Taran, A. Kulyk, O. Milevs'ka and others.

All these studies contribute to the improvement of pedagogical practice and the development of effective methods of working with older preschool children with general speech impairment, and therefore, we are convinced that there is a need for a detailed consideration and generalization of all important general scientific provisions in the context of this problem.

Purpose, subject and research methods

The purpose of this article is to study and analyze the peculiarities of social development of older preschool children with general speech impairment. The article aims to study the specifics of social development of this category of children, identify the main factors influencing their social development, and develop effective methods of supporting and stimulating their social adaptation. The subject of the study is the processes of social development of the category of children we have outlined. A set of theoretical research methods (analysis and synthesis of scientific, educational and methodological literature, which made it possible to compare different views on the problem under study) was applied.

Research results

The social development of older preschool children with general speech underdevelopment has its own characteristics. General speech underdevelopment in older preschool children, complicating the process of socialization, causes a significant limitation of their communication and life activity in society, leading to social maladjustment. Problems of socialization of preschool children are caused by a change in the socio-cultural conditions of personality formation, the contradictory state of socio-pedagogical theory and practice. In the current socio-cultural situation, the main dominant is the socialization of the individual as a result of their social development and upbringing.

An important role is assigned to the preschool educational institution - together with the family, to become the leading social institution of socialization, which ensures the introduction of socio-pedagogical support for the socialization of preschool children. It is also worth noting that play activity is important for older preschool children with general speech underdevelopment. Play creates a zone of proximal development for the child and through it the child develops.

Older preschool children with general speech underdevelopment find themselves in a difficult social situation that affects their social development. The main feature is that speech impairment can affect their ability to interact with others, develop social skills, and establish relationships with peers. These children may have difficulties in establishing contact with others, expressing their thoughts and desires, which can affect their social adaptation in the group. The specifics of the social

development of older preschool children with speech impairments include the need to develop individualized approaches to their social development [1]. It is important to provide them with support and promote active participation in social interactions. It is also important to create a favorable atmosphere for their inclusion in group activities, where they can feel part of the group and develop communication skills.

Children with speech impairments may also experience social isolation or misunderstandings from their peers due to their communication difficulties. Therefore, it is important to carry out individualized work with this category of children aimed at improving their speech potential and social skills [2]. The development of speech and social competence in such children requires a systematic approach that takes into account their individual needs and capabilities.

To achieve successful social development of older preschool children with speech impairments, it is crucial to actively apply intervention methods aimed at improving their communicative potential. This may include individual sessions with a speech therapist to work on articulation, vocabulary, grammar, and pragmatic language skills [3]. Group exercises in speech rehabilitation focused on facilitating social interactions and pragmatic language use in different contexts are also beneficial [8]. Other forms of support like using visual aids, modeling, and prompting can aid in developing language and social skills [2].

However, the successful socialization of these children does not solely depend on speech-language intervention. The participation of teachers, parents, and other members of the surrounding environment is equally vital. Creating a positive, accepting, and supportive atmosphere where every child feels valued, understood, and has opportunities for growth is crucial [4]. Teachers play a key role in fostering an inclusive classroom climate and facilitating peer interactions. Training them in strategies to support children with speech-language needs is important [1].

Parents can be actively involved in supporting their child's speech development by conducting daily home practice, creating communication opportunities, and providing a rich language environment [5]. Collaborating with the speech therapist and consistently implementing recommendations at home reinforces therapy gains [7]. In addition, it is important to involve children with speech impairments in various social activities like cooperative games, dramatic play, and group projects where they can practice interacting with peers and develop essential social skills in naturalistic settings [9].

In general, the successful social development of older preschool children with speech impairments requires a comprehensive, family-centered approach that combines direct speech-language therapy with facilitating an enabling environment and support system. It takes into account their individual needs, strengths, and participation in everyday activities and routines to provide support from multiple sources - specialists, families, and the community [6,10].

The further successful social development of older preschool children with speech impairments also depends on creating an inclusive environment where every child has the opportunity to participate in all aspects of group or community life. This means that children with speech impairments should have access to all types of activities, including play, learning, and social activities. It is important to create conditions where they feel accepted and important members of the group [5]. In addition, pedagogical workers must have sufficient knowledge and skills to work effectively with children with speech impairments. This means understanding the peculiarities of their development, being able to apply individualized methods and techniques for working with speech, and being able to create an adaptive environment conducive to the development of every child [6].

Finally, it is important to carefully consider and accommodate the specific needs of children with speech impairments when planning and organizing the educational process. This may include providing additional support in the form of individual or small group speech development sessions tailored to target their specific language goals and needs [7]. During these sessions, evidence-based techniques like focused language stimulation, scripted language modeling, and visual supports can be used to facilitate communication development.

In addition to direct therapy, using specialized materials and equipment within the classroom can greatly support communication and interaction for these children [7]. This may involve access to augmentative and alternative communication (AAC) devices or apps, visual schedules and supports, and adaptive equipment like voice amplifiers when needed. Environmental accommodations like minimizing classroom noise and modifying lesson delivery can also help maximize participation.

Such a comprehensive approach that provides direct therapy services integrated with inclusive classroom practices and supports will ensure quality social development of older preschool children with speech impairments. This facilitates their full inclusion by removing barriers and enabling them to meaningfully participate across all areas of the preschool program alongside their typically developing peers [1].

For the further successful social development of these children, it is also imperative to actively promote their self-determination and independence. This can be achieved by carefully structuring interactions and activities to stimulate their initiative, autonomy and independence in the process of interacting with peers and adults [8]. Embedding choices, encouraging them to express preferences, and providing opportunities to lead/make decisions during play and routines are helpful strategies.

Moreover, it is crucial to consciously encourage and reinforce their ability to express their thoughts, desires, and needs through whatever communicative means available to them - gestures, sounds, AAC, etc. Responding promptly and expansively to all their communicative attempts validates them as equal communication partners [5]. Providing judicious struggle time for them to

formulate messages on their own, before offering cues/prompts, nurtures independence. Celebrating and building on their autonomous communication sends the powerful message that their voice matters and they have control over their lives [8]. This promotes self-confidence, self-respect and facilitates social adaptation over time.

It is also important to maintain a favorable atmosphere and culture of mutual assistance in the group, where every participant feels supported and understood by others. This will create conditions for effective learning and social integration of children with speech impairments [9]. In addition, it is important to take into account the individual needs and capabilities of each child when planning and organizing social and educational activities. This may involve adapting curricula and teaching methods, using special tools and technologies, as well as involving support staff and specialists to support children with speech impairments in their social development.

In general, effective work with older preschool children with speech impairments requires a comprehensive approach and joint efforts of teachers, parents, and other participants in the educational process. Appropriate support and openness to individual needs will help every child realize their potential and achieve success in social life.

After considering the aforementioned aspects of social development of older preschool children with speech impairments, it is also worth turning to the importance of integrating modern technologies into the process of their learning and development. The use of digital tools can greatly facilitate access to educational materials and promote active involvement of children in the learning process [10]. For example, mobile apps and computer programs can be effective tools for developing speech and social skills. They can offer interactive tasks, games and exercises aimed at improving children's communication skills, as well as creating a virtual environment for communication with peers and teachers [9]. In addition, it is important to take into account the needs of children with speech impairments when developing and using digital resources. For example, some programs may have the ability to personalize, where the level of task difficulty is adapted to the individual capabilities of each child. It is also important to emphasize the role of parents and teachers in supporting the use of digital technologies for the development of children with speech impairments. Training in the proper use of digital tools and collaboration with teachers can help parents maximize the potential of these tools to support their child's learning and development.

Thus, the integration of modern technologies into the process of learning and development can significantly increase the effectiveness of working with older preschool children with speech impairments, contributing to their successful social development.

In addition, it is important to consider the possibilities of using virtual reality (VR) in teaching children with speech impairments. VR can create an immersive environment that simulates the real world and provide children with the opportunity to interact with various scenarios, which helps them

develop communication and social skills. For example, VR can be used to simulate real-life communication situations, such as shopping at a store, visiting a doctor, or simply everyday conversations with peers. Additionally, interactive games and exercises created using VR can be specifically adapted to the needs of children with speech impairments. They can include speech development exercises, virtual role-playing games where children can reenact various communication scenarios, as well as other tasks aimed at improving communication and social skills. However, it is important to remember the need for a balance between the use of digital technologies and other methods of child development. Technologies can be a useful tool, but they should not replace the basic methods of interaction and communication with the real world and peers.

Conclusions

Thus, the use of modern digital technologies, such as mobile applications and virtual reality, can be an effective addition to a comprehensive approach to the development of older preschool children with speech impairments. These technologies can provide new opportunities for learning and communication, contributing to their successful social development. At the same time, it is important to remember the importance of an individual approach to each child with speech impairment. Although digital technologies can be useful, not all children with speech impairments will respond to them in the same way. Therefore, it is important to continuously observe and evaluate each child's response to the use of such technologies and adapt the approach according to their needs and capabilities. In addition, the development of social skills in children with speech impairments can be supported through other methods, such as music therapy, art activities, dramatic arts, and physical exercises. These activities can stimulate communication, promote speech development, and establish social connections.

In general, a comprehensive approach that includes both digital technologies and other developmental methods is the key to the successful social development of older preschool children with speech impairments. By combining various approaches and individual support, we can ensure that every child has the opportunity to reach their potential and successfully integrate into society.

Based on the research and analysis conducted, it can be concluded that the successful social development of older preschool children with speech impairments requires a systematic approach and interaction of all participants in the educational process. The effectiveness of such an approach is determined not only by the ability to apply the latest digital technologies, but also by a deep understanding of the individual needs and characteristics of each child. In today's world, it is important to strive for the creation of an inclusive environment where every child has the opportunity to develop and feel important and accepted. Understanding and accepting diversity helps to form a tolerant and receptive society. Particular attention should be paid to the role of teachers and parents in the development of children with general speech impairments. Pedagogical workers must be well

prepared and equipped not only with knowledge, but also with empathy and understanding of the needs of each child. They play a key role in creating a favorable educational environment where every child can feel successful and confident. Parents are also important participants in the development of their children. Their support, understanding and belief in their child's potential can be a real support on the path to social development. It is through the joint efforts of parents, teachers and other participants in the educational process that we can create conditions for the full and successful development of children with general speech impairments.

In the future, research can focus on developing new intervention methods and approaches to working with older preschool children with general speech impairments. One potential area of research is the use of the latest digital technologies, such as artificial intelligence and virtual reality, in speech therapy practice. This can open up new opportunities for an individualized approach and improved effectiveness of rehabilitation measures. In addition, a promising direction is the study of the influence of the social environment and support on the social development of children with general speech impairments. Understanding and analyzing the role of family, teachers and the surrounding environment in shaping children's social skills can help improve pedagogical approaches and create more effective conditions for their social integration. It is also important to study the impact of play activities and recreational activities on the development of speech and social skills in older preschool children with general speech impairments. The development and testing of new programs and methods aimed at using game elements in speech therapy work can provide more effective results in the social adaptation of this category of children.

Finally, it is important to continue research in the fields of psychology and pedagogy in order to better understand the social processes taking place in a group of older preschool children with general speech impairments, as well as to develop new strategies and methods to support their social adaptation.

Bibliography

- Anishchuk A. M. Inclusive education: a textbook for students of higher educational institutions majoring in "Preschool Education". Nizhyn: NDU im.. M. Gogol, 2016. 150-155 p.
- Babenko O. M., Koltsova I. V. Application of game technologies in the development of coherent speech in older preschool children with speech impairments. Viche: Psychology and Computers, 2016. 66-72 p.
- 3. Botvinova T. V. Development and testing of a program for pedagogical support of coherent speech development in older preschool children with general speech underdevelopment by

- means of play activities. 3rd ed. Coll. scientific. pr.: Pedagogy and Psychology, 2017. 41-45 p.
- 4. Boichuk S. M Kupriienko A. V. Correctional work on coherent speech in children with GSU. Kyiv: Slovo Publishing House, 2019. 116-118 p.
- 5. Bohush A.M., Speech component of preschool education. Odesa: Yaroslav, 2004. 50-55 p.
- 6. Bohush A.M., Preschool linguistic didactics: theory and methodology. Zaporizhzhia: Prosvita, 2000. 210-212 p.
- 7. Bohush A.M., Savinova N. N. Pedagogical correction of speech in preschool children in play activities. Mykolaiv: Atolls, 2007. 50-56 p.
- 8. Vasyleva O. V. Development of coherent speech in older preschool children with speech impairments: methods and techniques. Methodological recommendations, 2015. 55-59 p.
- 9. Voichak O. V. Development of coherent speech in older preschool children with general speech underdevelopment through play activities: methodological recommendations, 2009. 86-90 p.
- 10. Valesa I. A. Problems of development of coherent speech in older preschool children. Zhytomyr State University Bulletin: Issue 44, 2009. 47-49 p.
- 11. Kalmykova L. O. Development of speech activity in preschool children: diagnostic and developmental program. Monograph. Pereyaslav-Khmelnytskyi: PE "SKD", 2010. 87 p.

DYNAMICS OF SOCIAL PEDAGOGY IN UKRAINE

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Abstract. The publication is devoted to the analysis and generalization of trends in the development of social pedagogy in Ukraine. The following is considered: formation of democratic social education and its theory as favorable conditions for formation of social pedagogy in Ukrainian lands; emergence of democratic "environmental pedagogy" (on the basis of J. Adams' settlement idea) during the days of the Russian Empire; an attempt to choose European approach in 1920s during the "Ukrainian renaissance" period; prohibition of social pedagogy as a bourgeois science during the Soviet era. The reasons for revival of social pedagogy at the end of 1990s during the collapse of the Soviet Union and its development in an independent sovereign Ukraine are revealed. Formation of the national system of social pedagogy (science, practice, education, management, information channels) took place along with formation of the system of social work. The downturn of social pedagogy since 2016 in the country, its inclusion into social work.

Keywords: development of social pedagogy, social pedagogy in Ukraine.

Introduction

Emergence and development of social pedagogy in the world is related to democratization of social life, with the awareness of society that its improvement is due to social creativity of the individual, that is, with state's attention to individuality of its own citizens. At the same time, the growth of society's demands to a person, as a result of complication of their social existence, cause the need to promote not only their individual, but also social development, so that unique individuality of free citizens does not turn into trivial egoism, so that each unique personality can cooperate and self-realize alongside another such individual and, moreover, so that they together contributed to the dynamics of the surrounding social environment. It is social education (as purposeful promotion of social development through all spheres of the socio-cultural environment) that is investigated by social pedagogy, which exists only in democratic countries. Emergence of social pedagogy on the territory of Ukraine is also connected with democratic processes, its explosive development was observed in the country especially during the time of independence, and a socio-pedagogical system was formed in the country. And it was logical, since social pedagogues were aware of the need for professional assistance in transforming a "cog in a large social mechanism" into a conscious, active

and responsible citizen of an independent country. Positions of social pedagogues were introduced in all educational institutions, in the field of social work, they worked in public organizations, sometimes in private production. Professional training of social pedagogues took place in all pedagogical universities, humanitarian and pedagogical academies and other institutions of higher education in the country. Candidate and doctoral theses were defended on the specialty 13.00.05 – social pedagogy. However, with the beginning of the war with Russia, there was a downturn of social pedagogy, which practically became a part of social work since 2016, despite the fact that the issues of the population's social development, namely national and civic identification, formation of the Europeanness of Ukrainians, only intensified.

The dynamics of social pedagogy in our country, the history of social education were studied mainly by specialists in social pedagogy in candidate and doctoral theses, including: I. Yelantseva "Development of social and pedagogical services and institutions for children in Ukraine (second half of the 20th century)" [5], N. Koliada "Development of the children's movement in Ukraine (beginning of the 20th century – mid-30s of the 20th century)" [13], V. Mashtakova "Development of social education in the Sloboda region (19th – beginning of the 20th century)" [21], A. Ryzhanova "Development of social pedagogy in the sociocultural context" [34], N. Seiko "Virtue in the education sphere of Ukraine (XIX-eraly XXth century)" [37], L. Shtefan "Establishment and development of social pedagogy as science in Ukraine (1920-1990s)" [46] and others. However, the dynamics of social pedagogy, especially in recent decades, have not been sufficiently studied.

Aim, subject and research methods

The purpose of the publication is to generalize the dynamics of social pedagogy and to understand the reasons for its collapse in Ukraine. The subject of the study is emergence and institutionalization of Ukrainian national social pedagogy. Among the research methods are: analysis of scientific research, summarization of the results of candidate and doctoral dissertations on the history of Ukrainian national social pedagogy, systematization of personal 30-year experience of participation in the development of social-pedagogical education into science, analysis and generalization of normative documents of the Ministry of Education of Ukraine regarding social pedagogy.

Research results

Development of the theory and practice of Ukrainian national social education in the second half of the 19th at the beginning of the 20th century

Emergence of social pedagogy in the Russian Empire, which at that time also spread to the Ukrainian territories, was preceded by active development of the theory and practice of social education, an increase in the level of civic activity in promoting social development, as a rule, of the needy sections of the population. Unfortunately, specifics of the history of social education in

Ukrainian lands under the rule of the Russian tsar have not yet been sufficiently studied and still remain scattered in national archives. An exception is the east of our country, namely Sloboda region, whose democratization trends in social education were investigated by V. Mashtakova [21]. Indeed, civic activity in promoting social development of the residents of the Ukrainian- Sloboda region began in the second half of the 19th century, which testified to the formation of the spiritual vanguard of the nation, whose representatives contributed to raising the socio-cultural level of the poor population through enlightenment, and not only the townspeople (Kharkiv People's House, amateur theater, choir, organization of public readings, Sunday schools of K. Alchevska, issues of the bibliographical collection "What should the people read?", first civic newspaper "The Southern Lands", etc.), but villagers as well (folk schools, free folk readings for villagers, village library committees, etc.). The Kharkiv Society of Literacy (1869) had branches in Sumy, Sloviansk, Vovchansk, and Bohodukhiv. We agree with V. Mashtakova that the growth of civil mutual responsibility was marked by formation of a network of relevant associations in practice: the Society of Mutual Aid of the Nobles, the Society of Mutual Aid of Sumy Merchants, the Society of Mutual Aid of Teachers, etc. [21, p.14].

Enlightenment contributed to the fact that, in addition to nobles, other social classes, such as merchants and even craftsmen, joined public mutual aid (charity) through guardianship. The directions of public care were: – provision of assistance to meet the basic needs of people in need ("Society of Industriousness", "School of cooks", hospital for terminally ill patients, etc.); – organization of social education of children of workers, orphans, "street children" (Kharkiv children's shelter, nursery shelter and others, which led to creation of the Society for the Care of Homeless Orphans, the Society for Combating Child Begging); – organization of leisure activities for children of townspeople and rehabilitation of sick children (Sunday and holiday children's entertainment, regional children's libraries, summer camps outside the city, etc.); – judicial protection of children with delinquent behavior and their re-education (children's courts, at the insistence of citizens, existed in Kharkiv, Kyiv and Odesa; Kharkiv Society of Juvenile Criminals, Society of Correctional Asylums) [34].

The spread of personal civic activity should be especially noted, for example, in Kharkiv, the Olginsky shelter was maintained at the bequest of burgher Nekrasov, and the craftsman I. Zlobin opened a shelter-housing for the children of the poorest craftsmen [34, p. 272]. Philanthropists from the Kharitonenki, Tereshchenko, and Simyrenki families are well-known in Ukraine. Kharitonenko sugar millers maintained a hospital and a canteen for workers, and two schools at their own expense. With their donations, real and cadet schools, a children's hospital, a school for girls from large families and orphans were opened in Sumy, which trained national teachers for their native region, and pensions were allocated to families that lost their breadwinner. In Kharkiv, they built and

maintained a children's shelter, a medical faculty building, and a dormitory for university students. We agree with V. Kuz, Y. Rudenko, O. Hubko, who note: "the facts show that P. Symyrenko gave a prominent place to social pedagogy in the formation of personality" [15, c. 67], because the philanthropist turned his estate in Horodyshche into the "City of the Sun". This socio-educational experience of P. Simirenko is extremely similar to the socio-pedagogical experiments of R. Owen in Great Britain and the USA. Therefore, the practice of social education in the Ukrainian Sloboda region as a whole corresponded with European trends, however, at the same time, we must emphasize that democratization of social education in the east took place later and more slowly than in the western Ukrainian lands, which had direct interaction with European democratic processes in the social development of a person and its society.

Regarding formation of Ukrainian national theory of social education, the scientific and pedagogical creativity of K. Ushinsky, who used the term social education, is indicative. In the publication "About nationality in social education" (1857), the outstanding Ukrainian teacher viewed this process, in our opinion, from the standpoint of civic education of the country's population and proved its role in social development of both the personality of a citizen and of society (as a social subject) in general: "Social education, which strengthens and develops nationalism in a person, simultaneously develops their mind and their self-awareness, contributing to the development of national self-awareness in general; it brings the light of consciousness into the repositories of the national character and has a strong and beneficial effect on the development of society, its language, its literature, its laws ... in short, on its entire history" [2, p.42]. K. Ushinsky's convictions regarding the interrelationships of types of social education are extremely contemporary (considering the European integration processes of today), since the pedagogue noted that "social education is people's family education", of course, from the point of view of the people as a separate social subject in the world community. The pedagogue emphasized that the national idea of social education contributes to the mutual improvement of a citizen's personality in society and a national personality on the world stage through their self-knowledge and self-awareness. However, characterizing social education as family education for the people, K. Ushinskyi in no way belittles its importance, in our opinion, on the contrary, he emphasizes its role in shaping subjectivity of the people next to others. The pedagogue warns about a threat to the existence of this subjectivity of the people in the absence of national values in the social upbringing of an individual: "the idea of their life, which made them a special people, becomes the common heritage of humanity; and their body – the tribe that made it up – having lost its uniqueness, decomposes and is assimilated by other bodies that have not yet lost their last idea" [2, p. 42]. We believe that K. Ushinsky's beliefs regarding social education are quite close to the ideas of national and civic education of his German predecessors J. Herder, J. Fichte and contemporary A. Disterweg. In addition, the views of K. Ushinsky were close to the ideas of J. Komensky and J.

Pestalozzi regarding inclusion of all spheres of society in solving the tasks of social education. He considered arousing public opinion regarding social education as the best way to improve it, he even claimed: "Where there is no public view on education, there is no public education, although there may be many public educational institutions" [2, p.44]. Ukrainian pedagogue highlighted, that active involvement of society in social education facilitates clearer definition and realization of the national idea by every member of the people, as it forces them to form their attitude towards the national mental values that the member translates to, first and foremost, their children, as well as other people, thus strengthening them within oneself: "A social education system that emerged not from societal conviction, no matter how elaborately it is designed, will end up powerless and will not influence neither the person's individual character, not the character of a society. It is able to train technicians, but will never be able to educate useful and active members of society, and if they do appear, it will be independently from education" [2, p. 44]. S. Shevyriov (although he was not a Ukrainian pedagogue) also talks about substantiation of the system of state social education. He tried to prove that public education should meet the needs of contemporary life, in which family education is inextricably linked with state education. Since "the state in its institutions creates a social – external person", in the family an internal, integral person is brought up, which provides the basis and value for the external one. S. Shevyriov proposes a three-level ("family education, state education, their fusion") system of social education for the Russian Empire (which also existed on the territory of Ukraine), where a person in general begins at the first level, a Russian at the second, an educated European at the third, ready for social life [anthol1,344]. So, first of all, national and ethnic education is not even mentioned in the social system, although the empire was multinational; secondly, the third degree is not so much the merging of the first two as the consideration of the social education of Russia's regional society in the world community. Thus, starting from the second half of the 19th century, the practice of social education on the territory where Ukrainians lived diversified and democratized. The challenges of industrial society force the progressive public, the pedagogues, to substantiate the theory of appropriate social education in order to promote social integration and consolidation thanks to social development of both citizens and society. In addition, mostly Ukrainian national teachers were familiar with leading foreign socio-educational ideas and theories. Moreover, Russian pedagogy at that time was based on German pedagogy, in addition not only through translation of textbooks on pedagogy, didactics, but even through borrowing of teachers from Germany. For example, the first director of the Kharkiv Pedagogical Institute in 1811 was Christopher Rommel, who came to Kharkiv from Marburg University and wrote a course of lectures "Didactics and Methodology" (Kharkiv, 1812) [27,4]. Paul Natorp's book "Social pedagogy: the theory of education of will based on commonality" was also published in Russia in 1911 [23]. Hence, the conditions for emergence of Ukrainian national social pedagogy were formed.

Formation of Ukrainian national social pedagogy under the Russian Empire and its ban during the Soviet era (beginning of the 20th century)

On the territory of the Russian Empire, in particular, the Ukrainian lands, emergence of social pedagogy is associated with the name of a person of Polish origin – Stanislav Teofilovych Shatskyi (1878-1934), although the idea of social and pedagogical activity in "The Settlement" was borrowed from Jane Adams by O. Zelenk, who traveled across the United States of America. However, when "The Settlement" was banned by the tsar for "spreading socialist ideas" and O. Zelenko left the country, S. Shatskyi took responsibility for the case and resumed the institution's activities under the new name "Child Labor and Recreation" [42, p. 415]. Summarizing his own experience of social and educational activities in "The Settlement" and in the summer labor colony "Vigorous Life", S. Shatskyi substantiated the "pedagogy of the environment". He consciously treated social pedagogy, which he sometimes called societal, in our opinion, emphasizing its democratic essence: his slogan was "transition from individual pedagogy to social pedagogy", the main task of which was "pedagogization of the environment": "Social-pedagogical work can only be clear and successfully implemented in life when it is closely related to the economic plan and the character of everyday life of the district" [42,420]. All institutions in which S. Shatskyi worked or headed were focused on "public child education". For example, "The Settlement" began with "a social study of the area... and building plans for its work based on these social conditions" [44, p.49]. "The Settlement" was actually a children's town and consisted of children's clubs, a kindergarten, an experimental school, and labor workshops for teenagers. The number of children reached 450, work with them was based on the principles of initiative, self-government, and self-help. The Settlement existed due to charitable donations [44, 49]. S. Shatskyi's conscious attitude to democratic values, on which activities with children were based, was manifested even in the midst of the chauvinistic fervor of the First World War: "he saved children ... from the excitement of hatred towards the Germans, which was quite common in the democratic circles of our public at that time", although it was not easy for S. Shatskyi himself and his pedagogical collective: "this position largely isolated me and my comrades from the general flow and social-pedagogical work" [42, p. 417-418]. However, the main socio-pedagogical dream of the pedagogue was "pedagogization of the social environment": in order to improve education, it is necessary to carry out wider cultural and educational work in the district, to influence adults as well – this will give an opportunity to revitalize public life in general. The founder of domestic social pedagogy realized this dream at the First Research Station of the People's Commissariat of Enlightenment (1919-1932). The essence of his socio-pedagogical approach was laid out by S. Shatskyi in the publication "School and Building Life" (1925): "as for the method, the idea of joint work with organized children on practical life issues and joint work with the mass of the population on the broadest health issues of a child's life, on the one hand, and everyday culture – on the other, give a huge impetus to mastering powerful means of education" [43, p. 292]. This approach of S. Shatskyi is very similar to the essence of the subject of social pedagogy, defined by its founder P. Natorp – social conditions of upbringing and educational conditions in society [23], since S. Shatskyi understood the pedagogy of the environment as the following: "to create favorable conditions in a certain environment for children, who draw both motives and materials for work from the same environment. We cannot talk about the pedagogical process that takes place only in special school buildings" [41, p. 296-297]. However, in contrast to P. Natorp, S. Shatskyi focused mainly on the social development of children: "The salvation is for the school to turn from an "educational institution" into a children's center... The school must become a part of life, ... which operates in the sphere of culture of child's being every minute in the process of its work" [40, p.85]. The implemented socio-pedagogical theory of S. Shatskyi in the practice of the First Research Station of the People's Commissariat received extremely high praise from both national and foreign experts. The Station was recognized as a standard of educational work at the pedological congress in the state, which included Ukrainian lands. The high level of democratic upbringing of the Station was emphasized by the outstanding American philosopher and teacher J. Dewey, who purposefully studied pedagogical innovations while traveling the world. According to the testimony of Z. Malkova, he wrote: "for the first time in history, I saw not a separate school, but a whole educational system, officially organized on the principle of connecting the school with society and the environment. What I saw in Shatskyi's colony has no analogues in the world. Pupils are involved in real activities to improve the surrounding social environment: they improve sanitary conditions, participate in elimination of illiteracy, teach villagers how to increase crop yields, etc. Russian schoolchildren are organized more democratically than ours" [19, p.98]. However, the Station was reorganized (actually destroyed) in 1932, because the Soviet authorities did not need either democratic education, a "life-school", or democratization of society.

It is surprising that S. Shatskyi's Station survived for so long, since the Soviet authorities actively fought with ideological opponents from the beginning. For example, the dictatorship of the proletariat immediately got rid of charity: after 1917, a special resolution was adopted "On the abolition of charitable institutions and societies for the assistance of the disabled and on the transfer of their affairs and sums of money to the executive committee of disabled soldiers" [24]. In 1920, there were still some public figures who defended the democratic view of social education. For example, V. Zinkivskyi in his work "Social education, its tasks and ways" (1918) argued that the essence of the ideal of social education lies in the spirit of solidarity and brotherhood of all people, on the basis of which the unity and mutual assistance of different social strata develop, but in 1919 he was sent abroad [8, p. 479]. Pedology, which was born as a pan-European pedagogical current even before the Bolshevik October coup, was also destroyed in the Soviet empire. Pedology,

according to the definition of P. Blonsky, is the science of the age-related development of a child under conditions of a certain socio-historical environment [34]. V. Kashchenko, who substantiated and used in his own medical and pedagogical activities the method of studying the impact of society on the child – social profiles [9; 10], paid special attention to the study of social factors' influence of on child development. All pedological directions (idealists, reflexologists, biogeneticists, sociogeneticists) made a significant contribution to the development of theory and practice (especially in the development of diagnostic tools) of democratic social education of children. The Soviet authorities (expecting confirmation from pedologists that proletarian children are the most progressive, developed, and educated) supported the development of pedology in practice until 1930s: professional pedological and pedagogical education was organized, the position of pedologist was introduced in schools, and nationwide pedologists meetings were held – being those of actual first school social pedagogues in the country. But at the beginning of the 1930s, the Soviet government strengthened and began a struggle to purify the state ideology from liberalism and "intellectual softness", and in fact from democratic values. Pedologists were "accused" of their professional activities at school: professional selection, mental differentiation and sexual education of students. Since pedologists did not confirm the highest mental level of a proletarian child, in 1936 the Resolution of the CPSU(b) "On pedological distortions in the system of the People's Commissariat" [25] was issued, which started the elimination of pedology in the country. As F. Fradkin rightly noted, the catastrophe with pedology led to the formation of a pedagogical scientist and practitioner -a"varnisher and reinsurer" [39].

Initially, at the all-Ukrainian level, while still believing in the freedom of choice of educational prospects of the republic, rather pro-European views on social education were substantiated, approved in the "Declaration on the Social Education of Children" and explained by the People's Commissar of Education of Ukraine in 1920-1923 H. Hrynko. The content generally corresponded with the party's program in the creation of Marxist-Leninist pedagogy. It was about education in the spirit of communism, about creating a unified system, about combining education and upbringing and education with industrial work, about expanding preschool education and extracurricular work. Ukraine was still allowed to disagree with the "Declaration" and "Regulations on a Unified Labor School" (1919) adopted by the RSFSR, not to reissue it, as was usually done in the constituent parts of a new country, but to replace it with its own. All children up to 15 years of age (7 million 600 thousand), and not only schoolchildren and those of proletarian origin, were recognized as the object of social education in Ukraine. Social education was considered to be "a system of protection, organization and upbringing of childhood". From the point of view of the National People's Commissariat of Ukraine "under conditions of an unheard-of intense civic struggle, the main task of education is not so much to improve pedagogical techniques as to fight for increasing the obligations of educational institutions to children" [4, p.353]. Starting from the deep crisis

of the family, from the "unheard-of growth of homelessness", the Ukrainian "Declaration" was more humane, its basis was not the ideological issues, but the needs of childhood: "It tries to examine the entire child population, and it tries to adapt the education system (that is, the sum of state measures) to the most pressing needs of childhood" [4, p. 347]. Therefore, social education was quite rightly based here on the protection of childhood, since it is known that social values cannot be effectively developed without meeting vital needs. However, such "independence" did not last long, in November 1922 the "Code of Laws on Public Education of the Ukrainian SSR" was adopted, which clearly confirmed the narrowly proletarian nature of social education in Ukrainian lands as well. The purpose of this enlightenment was stated to be "liberation of the working masses from spiritual slavery, development of self-awareness, creation of new people with a collectivist psychology, with a strong will, socially necessary qualifications and a materialistic worldview", while the governing bodies of education and enlightenment were to be "a tool of the dictatorship of the proletariat for the destruction of class society, the guide of the principles of communism and influence on the semi-proletarian strata of the working masses with the aim of educating a generation of builders of a communist society" [3, p. 311]. However, the entire population of Ukraine was already recognized as the object of public education ("Education and enlightenment of the new generation, as well as the entire working population, is one of the main tasks of the Ukrainian SSR" [3, 310]), therefore its system consisted of social education of children, professional education of youth and youngsters, scientific work and political education of adults. For example, Stepan Siropolko in the "History of Education in Ukraine" in the section "Public education in Ukraine during Soviet occupation" examines the following issues: school education system, preschool education, labor school, vocational school, worker and party education, higher schools, teacher education, science and scientific institutions, political education, librarianship, book publishing and the book distribution system, the press, etc. [38, p.909-912]. Summarizing, S. Siropolko draws conclusions regarding the inconsistency of educational policy neither with the basic principles of pedagogical science ("subordination of pre-school, school and out-of-school education to the directives of the Communist Party led to the Bolshevik government's neglect of the basic principles of pedagogical science in its educational policy"), nor with the interests of Ukrainian culture. On these grounds, he recognizes the state of public education in Ukraine as "completely unsatisfactory" [38, pp. 877-878].

Thus, neither pedology, nor democratic, humane social education, nor social pedagogy were unnecessary to the dictatorship of the proletariat. Social pedagogy – the pedagogy of a democratic society – was recognized by the Russian-Soviet authorities as "bourgeois science", which was equivalent to a "insurance shot" at it. The system of state socialist education began to be built, the core of which was not the person, in particular the child, but the Marxist-Leninist ideology, one for all, in which the individual was considered and used as a "cog in the social mechanism". Thus, socialist education during the Soviet era could not be democratic because of the attitude towards a

person as a means, and not as a goal. However, this upbringing made full use of the effectiveness of the environmental approach to manipulate the individual and social consciousness of the country's multi-million population, and when necessary, the belief in the truth of Marxist-Leninist values was supported by weapons, torture in mental hospitals, "re-education" in the "Gulag Archipelago" camp system. Therefore, in our opinion, there was no social pedagogy during the Soviet period and there could not be one precisely because of the ideological foundations of the totalitarian state. In our opinion, modern scientific research on the development of social pedagogy during the Soviet era (for example, L. Stefan's "Establishment and development of social pedagogy as a science in Ukraine (1920-1990s)" [46] and others.), with the exception of the 20s and 30s, investigate the use of the environmental approach in manipulative education-zombification to affirm and prolong the existence of the totalitarian regime. In general, the characteristic features of the formation of Ukrainian national social pedagogy is its focus only on children, in contrast to the socio-pedagogical model of the village by J. Pestalozzi [16], R. Owen's social-pedagogical model for industrial production workers, P. Natorp's social-pedagogical model of the state [23], in which, in addition to children, all adults were the objects of social-pedagogical activity.

Restoration of social pedagogy in independent Ukraine (1990s – 2014).

At the turn of the 1990s, real prerequisites for the revival and further development of the democratic experience of social education and social pedagogy, accumulated before 1917 and in the 20s and 30s, appeared in the Soviet Union: political (abandonment of the totalitarian system, restoration of relations with the democratic world); social (refusal of "person-state" social relations, the person being "a cog in a large social mechanism"); economic (establishment of market economy - it became "difficult" to live, there was a need to restore social mutual assistance - charity); axiological (restoration of value pluralism). The impetus for the renewal of social pedagogy was the activity of the Temporary Scientific Research Collective (TSRC) "School - Microdistrict", created at the Academy of Pedagogical Sciences of the USSR on February 22, 1989, with the aim of comprehensive research on the issues of raising children and adolescents at the place of residence. V. Bocharova, the head of the "Interaction of school, family and the public in the education of students by place of residence" laboratory of this academy, was appointed as its head. In fact, the main tasks of the TSRC "School - Microdistrict" were socio-pedagogical: creation of a fundamentally new concept of social education, which would involve improving extracurricular environment, overcoming spiritual emptiness in the sphere of life, family, and leisure; modeling of a unified system of education of children and adults by place of residence. The research had a complex and interdepartmental nature, as the Ministry of Education, the Ministry of Culture, the State Sports Committee, the Ministry of Internal Affairs, the All-Union Federation of Trade Unions participated in it. 100 experimental sites were created, where 2,000 specialists (teachers, philosophers, doctors, psychologists, lawyers, sociologists, etc.), 25 universities, and 2,500 teams from various institutions worked. Consequences of the activity: the concept of social education and proposals for the interdepartmental program of reconstruction of family and social education of students were developed; new professions "Social pedagogue", "Social worker" were introduced; professional profile and qualification characteristics of social pedagogues, curricula and programs of their professional training were developed; the All-Union Association of Social Teachers and Social Workers was created; the publication of the "Social Work" journal was launched; the image of social pedagogue in the working areas of the experimental sites was created. After 3 years, the TSRC "School – Microdistrict" turned into the Interregional Center of Social Pedagogy and Social Work [34].

Thus, the initiative to restore social pedagogy came from the center of the Soviet empire – from Moscow. Unfortunately, there were only 2 experimental social-pedagogical sites in Zaporizhzhya and Donetsk regions operating on the territory of Ukraine, that is, the experience of restoring social pedagogy was not enough among national teachers, these two sites (especially outside the capital) could not create a positive perception in society. However, the Decree of the State Committee of the USSR on Public Education "On the Introduction of the Institute of Social Pedagogues" (July 1990) and the qualification characteristics of a social pedagogue (March 1991) were also in force in our country. However, with the acquisition of independence, the advancement of social pedagogy in Ukraine slowed down. In our opinion, the reasons that hindered the active restoration of national social pedagogy (apart from the turbulent processes of state formation) were:

- lack of first a republican (Ukrainian SSR), and then a national scientific-methodical-informational center for social pedagogy;
- lack of a general concept of the development of social pedagogy as a system (science, practice, education, management, information channels), although its content components were developed in more detail (Concept of social work with children and youth of Ukraine, Concept of rehabilitation of disabled children and children with limited physical and mental capabilities, etc.);
- slow creation of a legislative framework: in Ukraine, union documents in the field of social pedagogy were not duplicated (as Russia did), therefore the Law "On Education" (1991) already referred to social and pedagogical patronage carried out by social pedagogues (though, without determining their social status), but the qualification characteristics of a social pedagogue were approved by the Cabinet of Ministers of Ukraine only in 1994 [11], the status of a social pedagogue as a pedagogical worker only in the 1996 edition of the Law "On Education";
- lack of an image of social pedagogy and social pedagogue in society, which is primarily a consequence of insufficient number of experimental sites of TSRC in Ukraine during Soviet times;

- insufficient attention of society to the issues of social education of a person throughout their life, even persistent fear of the democratic public regarding this education, as to manipulation in Soviet times;

- lack of specialist teachers in social education, social pedagogy, therefore the first Ukrainian national organizers of social-pedagogical practice, professional social-pedagogical education, scientific research went to study in Moscow, which did not contribute to their rapid increase for the great republic.

Hence, in independent Ukraine, social pedagogy was initially implemented thanks to the enthusiasm of individual specialists rather than centrally through the Ministry of Education. For example, in 1991, Kharkiv State Institute of Culture became the initiator of basic training of highly qualified specialists in the "Social pedagogy" branch at the educational qualification level of "specialist" in Ukraine. In accordance with the Ministry of Culture of Ukraine and the corresponding order of rector V. Sheiko dated April 12, 1991, a new specialty "Social pedagogue – organizer of culture and recreation activities" was opened. Among the founders of the new specialty, the leading place was occupied by the dean of the Faculty of Cultural Studies O. Kravchenko, the head of the Department of Pedagogy and Psychology B. Ishchenko, associate professor N. Buraia, who developed curricula and course programs of new disciplines in order to train specialists in social pedagogy, establish cultural foundations of their practical activities, to distinguish relevant specializations, since 1990. From September 1, 1991, 32 full-time students were enrolled in the "Social Pedagogy" specialty, who four years later were the first in Ukraine to receive diplomas of social pedagogues with basic education. That year, the training of specialists also began at the extramural department. In 1993, with the assistance of the vice-rector for scientific work M. Diachenko, a postgraduate course was opened at the department in the specialty 13.00.05 - social pedagogy. Again in 1991, socio-pedagogical retraining of specialists with pedagogical education and social-pedagogical retraining of specialists with higher education began in Donetsk and Zaporizhia. It was precisely the Donetsk enthusiasts who started the work of uniting those teachers and other specialists from different regions of the country, who were interested in developing Ukrainian national social pedagogy, in creating a relevant professional association. On August 7, 1992, the Ukrainian Association of Social Pedagogues and Specialists in Social Work, based in Donetsk, was registered in the Ministry of Justice of Ukraine [7, p.19]. Its main goal was: consolidation of efforts for establishment and development of social pedagogy and social work in Ukraine. V. Sydorov, the dean of the special faculty of Donetsk State University for retraining of social pedagogues and social workers, who became the chairman of the board of this Association, was at the origins of the Association. Since 1994, the Ukrainian Association has become a full member of the International Federation of Social Workers. The main tasks of the Ukrainian Association are indicated in its Charter: support of interested organizations and individuals in improving social and economic living conditions, in developing people's creative potential; formation of a personality that can act independently, proactively, responsibly; organization of activities of social pedagogues and social work

specialists in providing assistance to citizens and groups that have difficulties in socialization and social rehabilitation; promotion of raising the professional level and establishing the social status of social pedagogues, protecting their professional interests, creating favorable working conditions; implementation of control over the execution of ethical norms etc. [7, p.20-21]. The most effective, among the first, was the joint project of the Ukrainian Association and the International Federation of Social Workers, created with the support of UNICEF and the Christian Foundation – "Social Education in Ukraine". An example of this project's implementation was the holding of the international summer school "Volunteers among children and adolescents. Values. Ethics. Skills of social work" (Kyiv, August 1997).

A significant impetus in the development of the state approach to social pedagogy was the Concept of education in the national education system (1996), which proposed the introduction of a social pedagogy course at higher pedagogical educational institutions as a means of improving the educational mastery of specialists [14]. On these grounds, in each region of the country in pedagogical universities, large departments were created to teach the course to all future pedagogical workers (as a general department) and for professional training of social pedagogues (as a graduation department). In this way, the higher professional education of social pedagogues was scaled up, but there were no Ukrainian textbooks, so they taught mainly according to Russian ones (B. Bitinas, B. Vulfov, M. Galaguzova, A. Mudryk and others). The first Ukrainian textbook by L. Koval, I. Zvierieva, S. Khlebik "Social pedagogy/Social work" was published in 1997 [12]. The flow of scientific publications has increased, since teachers at higher education institutions are, in essence, scientificpedagogical workers. Scientific conferences on the exchange of experience were organized, in particular with the support of the Association, which relocated to Kyiv for the convenience of specialists. It is not surprising that the first doctoral dissertation defended in social pedagogy was the work of the dean of Zaporizhia University L. Mishchyk "Theoretical and methodological foundations of professional training of social pedagogues at higher education institutions" (1997) [22].

The socio-pedagogical system of Ukraine is gradually being formed: in 1997, the Ukrainian State Center of Social Services for Youth was founded, which played a leading role as the country's methodical center for organization and management of practical activities. The laboratory of social pedagogy, created at the end of 2002 by the Academy of Pedagogical Sciences of Ukraine at the academic Institute of Educational Issues, became the scientific and methodological center for promoting the development of domestic socio-pedagogical science. As a rule, most of those who "caught" social pedagogy gathered at the annual reporting scientific conferences of the laboratory under the lead of the director of the Institute of Educational Issues I. Bekh. Thanks to the Scientific Social and Pedagogical School (V. Kurylo, S. Kharchenko and others) of Luhansk National Pedagogical University named after Taras Shevchenko, the first specialized academic council D.29.053.01 for the defense of doctoral theses in the specialty 13.00.05 – social pedagogy was opened

(Luhansk, 2004), through which the majority of national doctors in social pedagogy passed, but S. Savchenko was the first [36]. In addition, Luhansk published the first specialized scientific journal "Social Pedagogy: Theory and Practice" (2004), which laid the foundation for multilateral relations between socio-pedagogical science, education, practice and management in Ukraine. Since January 2004, the position of social pedagogue has been introduced at institutions of general secondary education.

Thus, until 2014, at all higher pedagogical education institutions and at many classical universities social pedagogy departments were created, which have already accumulated experience in professional education, established contacts with practice bases, worked out educational programs, improved curricula and programs of academic disciplines; published scientific articles, monographs, textbooks on social pedagogy; training of post-graduate students and doctoral students was carried out, specialized academic councils were created for the defense of dissertations in their specialty. For example, between 1997 and 2010, for the first time in Ukraine 15 doctoral dissertations on social pedagogy were defended (12 of them between 2004 and 2010). The positions of social pedagogues were gradually introduced at all educational institutions and social services; qualified social pedagogues worked at some private enterprises, at public organizations, newspapers, on local television, in city parks, on playgrounds in supermarkets, as heads of local communities, etc. In Ukraine, there has been an explosive increase in public, non-governmental organizations, associations, and movements, volunteering has strengthened. However, in our opinion, theoretical foundations of social pedagogy have not been sufficiently explored by national specialists. It is normal when, during formation of a scientific field, there are many of its paradigms – it contributes to a deeper understanding of the essence of social pedagogy. But the analysis of the views of scientists on the object, subject, goal, object of activity, the leading concepts of social pedagogy revealed that many of them simply refer to the theories of Russians (which until 2014 were considered a component of domestic science), some considered social pedagogy a theory of social work, others confused social pedagogy with sociology, some teachers completely denied the existence of the social field of pedagogy (they say that all pedagogy is social). The results of this analysis showed that national social pedagogy did not sufficiently identify itself, was not definitively isolated at the internal-pedagogical level, did not define its specificity at the external level - among social fields: social work, social psychology, sociology, etc. – all this significantly hindered the affirmation of social pedagogy in Ukraine [32; 35]. Our historical-pedagogical and socio-cultural study of the development of the practice and theory of social education from the beginning gave grounds to generalize the reasons for the emergence of the idea of social pedagogy in antiquity and its justification in the industrial age. On these grounds, a personal view on the socio-cultural essence of social pedagogy of the industrial age and the prospects for development in the information society, particularly for the benefit of Ukraine, was formulated [32]. It is clear that since the defense of the doctoral dissertation, the author's formulations in determining the theoretical and methodological foundations have changed, but the essence has remained the same. In our opinion, the object of social pedagogy research is socialization of a person, group, and society. The subject is revealed through its sociocultural essence: "social pedagogy is a branch of cognitive and transformative pedagogical activity aimed at harmonizing sociality of social subjects by non-coercive means through research and scientifically based regulation of social education of an individual, group, society; a means of democratic harmonization of socio-educational influences of all spheres of society in order to strengthen its centerward orientations, which contributes to the cultural dynamics of a person and their social environment" [32, p. 35]. This interpretation emphasizes the pedagogical belonging of social pedagogy, since the latter is evidence of differentiation of the pedagogical field under conditions of acute socio-cultural changes, which required a higher level of human sociality (of other social subjects), as a result of branching and deepening of its social interaction. Strictly speaking, in the 20th century, due to the same socio-cultural processes, social psychology, social philosophy, social anthropology, and later social culturology emerged, the relevance of which no one denies. It is also necessary to note the concept of "sociality" – as the goal of social education – a hierarchy of social values, social qualities, prosocial behavior – and a social-educational result – the manifestation of individual positive and creative attitude towards social, in particular to family, ethnic, civic, regional, global etc., being. That is, social values should not be confused with political values. Social pedagogy is aimed at promoting the ascent of social subjects through social steps, overcoming the egoism of the previous ones: overcoming personal egoism for the sake of family values, family egoism for the sake of ethnic values, national egoism for the mastery of civic values, civic egoism for promotion to regional-European values etc. Overcoming egoism does not mean rejection of relevant social values, but only indicates prevention or overcoming of their absolutization, which, as a rule, stops social development and causes the growth of social proneness to conflict.

Decline of social pedagogy in Ukraine (2015 – present)

The end of the development of social pedagogy was put by the Ministry of Education and Science of Ukraine, which, during the reform of the field, in the "List of fields of knowledge and specialties for which higher education students are trained" (2015) [28] delegitimized both social-pedagogical education and science. Social pedagogy ceased to exist as a component of pedagogy, but "drowned" in social work, since there are still specialties 231 Social work and 232 Social welfare in the field 023 Social work. Social-pedagogical activity can exist only as a specialization in the specialty 231 Social work. In such a situation, some scientists who worked on candidate and doctoral theses in social pedagogy changed the code of their specialty or chose another topic. The country's socio-pedagogical public tried to avert the destruction of social pedagogy: letters were sent to the Ministry from higher education institutions, from public organizations, social

institutions, and the public; an appointment was made with the minister; scientific conferences were held, articles were written – all this in an attempt to prove the "benefit" of social pedagogy for Ukraine, persuading to preserve the social branch of pedagogy in pedagogical sciences. A. Kapska made a specially large contribution for this. However, it was in vain, the main answers were: "they defend their own interests", "they are against reform".

Therefore, since 2016, higher education institutions across the country have been recruiting only for the "Social Work" specialty instead of social pedagogues for bachelor's, master's, and postgraduate degrees; understandably, the departments gradually began to change their names accordingly. Paradoxically, at the same time, the Law "On Education" (2017, 2022 edition) in Article 76 "Psychological service and sociopedagogical patronage in the education system" states that "social-pedagogical patronage in the education system contributes to interaction of educational institutions, families and society in the education of students, their adaptation to the conditions of a social environment, ensures prophylaxis and prevention of bullying (harassment), provision of advisory assistance to parents, psychological escort for students who have suffered from bullying (bullying), witnessed it or committed it. Social and pedagogical patronage is carried out by social pedagogues" [29]. In our opinion, it is generally written correctly (although why only patronage, why not social-pedagogical activities in general? why does a social pedagogue carry out psychological escort?), but the lack of logic lies in the fact that there is no training for students of higher education in such specialty in Ukraine, specialization is not the same. According to the law, a social pedagogue in the education system has the status of a pedagogical worker, but a social worker trained by modern higher education institutions does not have this kind of status. Yes, the positions of social pedagogues were preserved in general secondary education institutions, preschool institutions, etc., but they were removed from state social services (it should be appreciated, that the number of social workers there is also being reduced). Specialists in social pedagogy hoped that it would be restored in the Project of a new list of fields of knowledge and specialties, for which higher and professional pre-higher education applicants are trained, which appeared on the website of the Ministry of Education and Science in September 2023 [26] for public discussion. However, according to the Project, there will be no branch of science called "Social work", but only the letter code "I" Health care and social security, that is, now social security is a component of social work, and social work will be a component of social security (well, surely not health care, although who knows?). Social work and counseling is indicated under the specialty code "i7" (and why not provision? due to the lack of such a specialty nowadays). It is clear that social pedagogy is even further from the new branch "I" than from the existing 021 Social work. Pedagogical sciences will also disappear under the Project (the existing list: branch – 01. Education/Pedagogy, specialty – 011 Educational, pedagogical sciences), since there will be branch A Education, specialty – A1 Educational sciences. In our opinion, it is difficult to determine the logic and system of knowledge in the existing and project lists, but it is obvious that, according to the compilers of the Lists, social pedagogy has no place there.

Unfortunately, it turned out that in democratic Ukraine, regardless of its issues with the sociality of citizens (civic dignity and responsibility, social trust, tolerance, social creativity, solidarity, etc.), social pedagogy and social pedagogue, a specialist in social education, have become unnecessary, especially with the urgent need for integration and consolidation of society during wartime. Reflecting on the reasons for this state of affairs in our country, we can name the following: 1) insufficient development of theoretical and methodological foundations of social pedagogy, its lack of distinction in pedagogy, its lack of distinction from social sciences; 2) lack of a wide circle of social pedagogues (scientists, educators, practitioners), their lack of cohesion due to "youth" of the domestic social field of pedagogy, unconvincing arguments regarding sociocultural significance of social pedagogy for an independent country; 3) absence of a positive image of social pedagogy in society, its identification with manipulative socialist education (in Soviet times it was initially called social education), persistent fear of education in general – treating it as a manipulation of consciousness; 4) Russian influence – the deliberate destruction of the field of pedagogy, which contributes to the stability and strength of Ukrainian society, its central orientation and the high level of citizenship of the country's population (the process of destruction began precisely after the attack on Ukraine in 2014); 5) subjective causality: perhaps the reformers, having higher education in English-speaking countries where there is no social pedagogy, simply "did not see" its viability in Ukraine; maybe one of those who made the final decision was "offended" by those who spread social pedagogy throughout the country, and therefore "closed" it (unfortunately, this is possible according to the "family-neighborly" approach to solving state affairs). Perhaps a combination of these and other reasons worked, but the fact turns out to be this: in democratic Ukraine, whose president convinces the world of the military defense of these very values, social pedagogy ceases to exist, just as it did in Nazi Germany and the communist Soviet Union, with the only difference that it in our country it was quietly "reformed", and in others it was demonstrably banned. In fact, it is strange for another reason, our country has applied to join the European Union, and in almost all Western neighboring countries, social pedagogy and positions of social pedagogues exist not only in the system of educational institutions. The European Union countries have accumulated experience in solving extremely complex internal and external social issues through socio-pedagogical approach. For example, Germany, which managed to overcome the revanchism of fascism, restore national dignity, social trust, unite the people "torn" by the Berlin Wall, not least thanks to democratic social education, the modern technologies of which were developed by German social pedagogy. It was through socio-pedagogical means that the issues of social mistrust between neighboring peoples: the French, the Germans, the Poles and others were solved, which enabled them to voluntarily unite in a regional union.

We hope that the importance of social pedagogy for preserving civic consolidation, strengthening of national-civic identification, spreading civic dignity after the war will be realized by the ruling circles of education, by the state, and this "reformed-destroyed" social branch of pedagogy will return to the national family of pedagogical sciences. Moreover, in social pedagogy there is an objective task regarding the

substantiation of contemporary technologies of social education for non-forced development of Europeanness (regional-European level of sociality) of Ukrainians, without which the country's dignified and equal entry into the European Union is impossible. In addition, the war (there is no evil without good), the resistance of the people to the occupiers, the extraordinary international activity of President V. Zelenskyi actualized the global subjectivity of Ukraine, but in order to fix, strengthen and deepen it, scientifically proven technologies of social education are needed to promote the development of globality (global level of sociality) of our compatriots. Thus, the potential of social pedagogy in Ukraine is not exhausted, there are prospects for its contribution to the social development of a national citizen, as well as the Europeanness and globality of Ukrainians.

Conclusions

Summarizing, it should be noted that the general trends in the development of social education and social pedagogy on the territory of Ukraine were mainly determined by the Russian Empire (tsar's rule, Soviet rule). From the middle of the 19th century and the beginning of the 20th, the democratization processes in society (as a result of the development of industrial production) contributed to the completion of the formation of a system of social education based on religious values, but it was regulated by the state. Interrelated elements of this system were religious, family, state, public education. It was public education through enlightenment and guardianship that contributed to the search for ways to solve the socio-cultural crisis of the industrial age in relation to reproduction of the population under conditions of industrial production, attracting ever wider circles of citizens to philanthropy. At the same time, the theory of social education was formed, which in general corresponded to the European search for solving the social issues of the new age of humanity by means of education. Unfortunately, the social education of this period on the Ukrainian territory has not been sufficiently researched, there are only the primary generalizations of this process in the east of the country – in the Sloboda region, which was not ahead of the dynamics of national social education.

The idea of social pedagogy in the Russian Empire, to which Ukraine belonged at that time as well, was borrowed from the American Settlement by J. Adams. The model substantiated by S. Shatskyi had an environmental emphasis – "pedagogy of the environment" – and concentrated only on children. The experience of the First Research Station of Narkompros under the chairmanship of S. Shatskyi was recognized as a benchmark in the middle of the country and the most democratic in the world. The practical activity of pedologists led to the introduction of the position of pedologist at schools – actually the first social pedagogue in education. Under conditions of the formation of the communist-socialist model of social education in Soviet times, the People's Commissar of Education of Ukraine in 1920-1923 H. Hrynko tried to choose a European approach to childhood, its protection, organization, and education on humanistic principles in the "Declaration on the Social Education of

Children". However, the "dictatorship of the proletariat" principle was also applied to education, the center of which is not a person, but Marxist-Leninist dogmas. S. Shatskyi's socio-pedagogical experiment and pedology was purposefully destroyed, public figures with democratic values in education were expelled (those who survived), social pedagogy was recognized as a bourgeois science. However, the environmental approach was used by the Soviet authorities to form a state system of zombification of the country's population from birth to death.

The renaissance and bright flourishing of social pedagogy took place in independent Ukraine, initially by the efforts of enthusiasts, and after its introduction into institutions of higher pedagogical education as a general pedagogical discipline, and after the creation of appropriate departments, a social and pedagogical boom began. From 1991 to 2014, socio-pedagogical practice (positions of social pedagogues were introduced at institutions of education and social work, they worked at public organizations, in the field of recreation, sometimes in production teams, in mass communication media, local self-government, etc.), social-pedagogical education (all pedagogical higher education institutions, some classical universities trained social pedagogues in various specializations), sociopedagogical science (the system of postgraduate-doctoral studies, specialized academic councils for the defense of candidate and doctoral theses), professional information channels (the "Social Pedagogy: Theory and practice" journal, the "Social Pedagogue" newspaper), a professional association, etc. were formed. However, after the attack of an aggressive neighboring state, in the process of reforming the educational sector in 2015, the specialty "Social pedagogy" disappeared from the list of fields of knowledge and specialties for which higher education candidates are trained in Ukraine, there are no plans to return it in the Project of the corresponding 2023 list. Obviously, there were both objective and subjective reasons for this. Perhaps national social pedagogy (which was learned by modern specialists from Russian textbooks) should be oriented towards European models, under conditions of the country's inclusion into European integration processes. However, it will definitely "be useful" for Ukraine in order to strengthen the consolidation of the country in postwar times, to promote the development of Europeanness and globality of its citizens during the period of acquisition of the country's European and global subjectivity.

REFERENCE

- 1. Anthology of pedagogical thought in Russia. The first half of the 19th century. Moscow: Pedagogy, 1987. p. 558.
- 2. Anthology of pedagogical thought in Russia. The second half of the 19th century the beginning of 20th century Moscow: Pedagogyka, 1990. p. 603.
- 3. Anthology of pedagogical thought of the Ukrainian SSR. Moscow: Pedagogyka, 1988. p. 640.

- 4. Hrynko H. Social education of children. Y. Mamontov. Textbook of contemporary pedagogical currents. Kharkiv: State Publishing House of Ukraine, 1926. pp. 346-358.
- 5. Yelantseva I.I. Development of socio-pedagogical services and institutions for children in Ukraine (second half of the 20th century): author's abstract of a pedagogical sciences candidate majoring in 13.00.01 general pedagogy and history of pedagogy. / Kharkiv National Pedagogical University named after H.S. Skovoroda. Kharkiv, 2019. p. 20.
- 6. Zvierieva I.D., Koval L.G. Social pedagogy as a basis of social work. Dovira I nadiia. 1994. No. 5. pp. 3-34.
- 7. Information-methodology bulletin No. 1 of the Ukrainian Association of social pedagogues and specialists in social work. Donetsk, 1992. p. 96
- 8. History of pedagogy: Part 2.: From the 17th century to the middle of the 20th century / Ed. by A.I. Piskunova. Moscow: TC "Sfera", 1998. p. 304.
 - 9. Kashchenko V.P. Pedagogical correction. M.: Prosveshchenie, 1994. p.223.
- 10. Kashchenko V.P. Social profiles // The issues of studying and educating a child. M., 1926. pp. 47-57.
- 11. Qualification characteristics of a social pedagogue. *Information collection of the Ministry of Education of Ukraine*. 1994. No. 20. pp. 15-32.
- 12. Koval L.G., Zvierieva I.D., Khlebik S.R. Social pedagogy/Social work. Kyiv, 1997. p. 390.
- 13. Kolyada N.M. Development of the children's movement in Ukraine (beginning of the 20th century –mid-30s of the 20th century): monograph. Uman: PP Zhovtyi, 2012. p. 407.
- 14. The concept of raising children and youth in the national education system. Information collection of the Ministry of Education of Ukraine. 1996. No. 13. pp. 2-16.
- 15. Kuz V., Rudenko Y., Hubko O. Ukrainian Cossack pedagogy and mentality. Uman, 1995. p. 115.
- 16. Malko A.O. I.H. Pestalozzi's socio-pedagogical model of the micro-society. Issues of pedagogical technologies: coll. of science works Lutsk: VDU, 2002. Issue 4. pp. 49-56.
- 17. Malko A.O. Social pedagogy. Part 1. Basics of social pedagogy: Outline of lectures. Kharkiv: KSAC, 1998. p. 56.
- 18. Malko A.A. Social pedagogy in the system of pedagogical sciences. Materials for the VIIIth International Science and Practice Conference "Science and Education 2005". Dnipropetrovsk, 2005. T.42 Social pedagogy. pp. 18-20.
- 19. Malkova Z.A. John Dewey the philosopher and reformer pedagogue. Pedagogy. 1995. No. 4. pp. 95-104.
- 20. Matseikiv T. I. Ukrainization in the system of social education of children and youth (1920s). Theoretical and methodological issues of raising children and school youth: collection of

scientific works.: In 2 books. Book 2. – K.: Institute of Issues of Education at the APS of Ukraine, 2002. – pp. 226-231.

- 21. Mashtakova V.O. Development of social education in the Sloboda region (XIX early XXth century): author's abstract of a candidate of pedagogical sciences in the specialty 13.00.05 social pedagogy. / Luhansk National Pedagogical University named after Taras Shevchenko. Luhansk, 2011. p. 20.
- 22. Mishchyk L.I. Theoretical and methodological foundations of professional training of social pedagogues at higher education institutions: dissertation of Ed.D.: 13.00.05. Zaporizhia, 1997. p. 358.
- 23. Natorp P. Social pedagogy: The theory of education of the will on the basis of community / trans. by A. A. Grombakh from the 3rd supplemented German ed. St. Petersburg: O. Bohdanova, 1911. p. 360.
- 24. On the abolition of charitable institutions and societies for provision of assistance to the disabled and on the transfer of their affairs and sums of money to the executive committee of disabled soldiers. Theory of social work / Ed. by E.I. Kholostova. Moscow: Jurist, 1998. pp. 16.
- 25. Resolution of the Central Committee of the Communist Party of Ukraine (b) "On pedological distortions in the system of Narkomos". Collection of orders of the People's Commissariat of Education. 1936. No. 18. pp. 4-6.
- 26. The project of a new list of fields of knowledge and specialties for which higher and professional pre-higher education applicants are trained. https://mon.gov.ua/ua/news/proyekt-novogo-pereliku-galuzej-znan-i-specialnostej-za-yakimi-zdijsnyuyetsya-pidgotovka-zdobuvacchiv-vishoyi-ta-fahovoyi-peredvishoyi-osviti
- 27. Prokopenko I.F. At the turn of the century (190 years of Kharkiv State Pedagogical University named after H.S. Skovoroda). *Kharkiviany*. 2001. No. 6. October 8-14 pp. 1,4.
- 28. On approval of the List of fields of knowledge and specialties for which higher education applicants are trained: resolution of the Cabinet of Ministers. https://zakon.rada.gov.ua/laws/show/266-2015-%D0%BF#Text
- 29. On education: the law of Ukraine (Vidomosti of Verkhovna Rada (VVR), 2017, No. 38-39, Article 380) 04.06.2022 edition, basis 1986-IX https://zakon.rada.gov.ua/laws/show/2145-19#Text
- 30. Ryzhanova A. The past and the future of social pedagogy. *Wspolczesne strategie i wyzwania edukacyjne. Aktualne problemy, rozne perspektywy* / Panstwowa Wyzsza Szkola Zawodowa w Chelmie, Institut Juraja Palesa v Levoci. Chelm, 2012. pp. 257-264.
- 31. Ryzhanova A.O. The danger of transforming social pedagogy into social work. *Culturology and social communications: innovative development strategies*: materials for the International Science Conference (November 23-24, 2017, Kharkiv, KSAC). Kharkiv, 2017. pp. 136-138.

- 32. Ryzhanova A.O. Development of social pedagogy in the sociocultural context: author's abstract of Ed.D., specialty 13.00.05 social pedagogy, Luhansk, 2005, p. 44.
- 33. Ryzhanova A.O. Social education in Ukraine: dynamics from authoritarian to democratic times. Norwegian Journal of Development of the International Science. 2020. No. 42. VOL. 4. pp. 37-43.
- 34. Ryzhanova A.O. Establishment of national socio-pedagogical science and practice. Development of social pedagogy in the sociocultural context: dissertation of Ed.D. for the specialty 13.00.05 social pedagogy. / Kharkiv State Academy of Culture. Kharkiv, 2004. pp. 257-293.
- 35. Ryzhanova A.O. The current state of national social pedagogy. Bulletin of the Kharkiv State Academy of Culture: coll. of science works Issue 23. Kharkiv: KSAC, 2008. pp. 201-212.
- 36. Savchenko S.V. Scientific and theoretical principles of socialization of student youth in extracurricular activities under conditions of the regional educational space: dissertation of Ed.D.: 13.00.05 social pedagogy Luhansk, 2004. p. 455.
- 37. Seiko N.A. Philanthropy in the field of education of Ukraine (XIX early XX century): author's abstract of Ed.D., specialty 13.00.05 social pedagogy / Luhansk National Pedagogical University named after Taras Shevchenko. Luhansk, 2009. p. 44.
 - 38. Siropolko Stepan History of education in Ukraine. K.: Nauk. dumka, 2001. p. 912.
 - 39. Fradkin F.A. Pedology: myths and reality. Moscow: Znanie, 1991. p. 80.
- 40. Shatskyi S.T. Contents and methods of pedagogical work Mamontov Y. Textbook of contemporary pedagogical currents. Kharkiv: State Publishing House of Ukraine, 1926. pp. 84-91.
- 41. Shatskyi S.T. Studying life and participating in it. Shatskyi S.T. Selec. ped. works Moscow: Uchpedgiz, 1958. pp. 293-300.
- 42. Shatskyi S.T. My pedagogical path. Shatskyi S.T. Selec. ped. works Moscow: Uchpedgiz, 1958. pp. 410-423.
- 43. Shatskyi S.T. School and construction of life. Shatskyi S.T. Selec. ped. works Moscow: Uchpedgiz, 1958. pp. 267-293.
- 44. Shatskyi S.T. Children are the workers of the future. Shatskyi S.T. Selec. ped. works Moscow: Uchpedgiz, 1958. pp. 27-80.
- 45. Sheiko V., Ryzhanova A. Transformation of social pedagogy in the culture of the information society. *Zamojskie studia i materialy. Seria: Pedagogika*. Volume XV zeszyt I /Wyzsza szkola zar-zadzania i administracji m. Zamosciu. Zamosc, 2013. pp. 129–136.
- 46. Shtefan L.A. Formation and development of social pedagogy as a science in Ukraine (1920-1990s): author's abstract of Ed.D. by specialty 13.00.01 general pedagogy and history of pedagogy / Kharkiv State Pedagogical University named after H.S. Skovoroda / L.A. Shtefan. Kharkiv, 2003. p.36.

PROFESSIONAL TRAINING OF FUTURE VOCATIONAL TEACHERS IN THE CONTEXT OF DIGITALIZATION OF EDUCATION

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Abstract: This article highlights the unique aspects of using computer modeling in the development of the professional competence of future vocational teachers. It considers the specifics of their professional activities and the widespread adoption of distance and blended learning. The classification of computer modeling by types – conceptual, informational, structural and functional, mathematical, and simulation – is discussed. The characteristics of these types are presented based on their potential applications in the professional training system for future vocational teachers.

Considerable attention is given to analyzing the potential of mathematical and simulation computer modeling, as these methods are indispensable in designing and implementing modern scientific and technological innovations. Consequently, the ability to build computer models is considered a crucial condition for forming a high level of professional competence in future vocational teachers. The application of this method is examined within the context of laboratory classes in various disciplines such as "Electric Drive and the Use of Electricity in Agriculture," "Engineering and Computer Graphics," "Technical Mechanics," "Agricultural and Land Reclamation Machines," and "Tractors and Cars." Using this method within a research approach in professional disciplines enables students to master modeling objects and processes for further study.

Simultaneously, the author emphasizes that the new knowledge acquired by students leads to adjustments in the created model, allowing for its continuous improvement. The quality of the model reflects the level of professional competence of the future vocational teacher.

Thus, according to the authors, the use of computer modeling will enable a more effective organization of the educational process under distance and blended learning conditions, thereby enhancing the professional competence and readiness for professional activity of future vocational teachers.

Keywords: formation of professional competence, vocational teacher, computer modeling, mathematical modeling, mathematical model, professional training.

Introduction

Training qualified specialists for various sectors of the national economy to meet labor market needs is the foundation of the state's social and economic development and its defense capability.

According to V. Radkevych, vocational education is the most integrated into the country's economy among other educational systems. It reflects the implementation of an investment and innovation model of economic development in social production, based on scientific and technological progress, knowledge-intensive, energy-efficient, and digital technologies, and an increase in financial efficiency and competitiveness [6]. In today's environment, production and tools are becoming more digital, technological, and automated. This shift creates a new type of employer demand for the training of competent and competitive specialists who meet global production standards.

Therefore, the purpose of the vocational and professional higher education system is to meet the labor market and state needs for competitive specialists capable of producing and operating high-tech, modern equipment and machinery. Ensuring the fulfillment of this goal in the current political and socio-economic conditions remains a challenging task for vocational teachers. To address this, the state is continually improving educational processes and orienting them towards training specialists capable of conducting research and implementing innovative processes and developments. This directly relates to the system of training vocational teachers, whose qualifications determine the quality of educational services provided in vocational and professional higher education institutions.

The analysis of the content of the work programs for the above disciplines has shown that their study will be more effective if a research approach with experimental methods of cognition is used. These methods form the basis of the didactic principle of science in the professional training of students, which, in turn, is fundamental to professional education. This includes the principles of systematicity and consistency, accessibility of learning, the unity of consciousness and activity, and the connection of theory with practice.

Considering the peculiarities of the professional activity of future vocational teachers and based on their personal experience of professional training, more effective teaching methods using innovative technologies can be proposed. The effectiveness of forming the professional competence of future vocational teachers is closely related to the pedagogical system of higher education institutions (HEIs). Therefore, in their professional training, it is advisable to use computer modeling integrated with traditional teaching methods.

The use of computer modeling in the educational process of higher education institutions, optimization of the educational process, and the introduction of innovative pedagogical technologies are subjects extensively covered by scholars such as V. Bespalka, Ye. Mashbytsia, I. Ziaziun, H. Ihnatenko, V. Kovalchuk, O. Kovalenko, A. Nikulina, N. Nychkalo, V. Radkevych, S. Shevchuk, O. Shcherbak, and I. Pidlasyi. The application of the modeling method in training future specialists has been studied by R. Horbatiuk, I. Lutsyk, O. Bereziuk, V. Fedoreiko, G. Shannon, G. Sukhobska, P. Shcherban, and other scholars.

However, it should be noted that the problem of introducing computer modeling into the educational process in higher education is quite complex. Despite the widespread adoption of distance and blended learning in modern higher education institutions, it remains unresolved. According to R. Horbatiuk, this is primarily due to the need for caution in introducing computer modeling into the educational process for humanistic and material reasons. The issue of integrating computer modeling into the training of future vocational teachers is currently not well understood.

Purpose, Subject, and Methods of the Study

The purpose of this article is to determine the peculiarities of forming the professional competence of future vocational teachers through computer modeling during their professional training.

The subject of the study is the use of computer simulation in laboratory classes in technical disciplines to form future vocational teachers' professional competence in the context of the digitalization of their professional training.

The research was conducted using the methodology of social research based on a systematic approach, including methods of modeling, forecasting, comparison, systematization of logical and scientific analysis of computer modeling software, and analysis of research results.

Research Results

The need to organize the educational process in distance or blended learning at HEIs as a result of the COVID-19 pandemic and later martial law prompted teachers to introduce digital technologies more widely in the design of educational experiments. This reduced the time required for experimental measurements and data processing for students but increased the workload of the teachers in connection with the preparation and development of both the teaching tools themselves and their methodological support. However, such intensification allowed for more dynamic modeling of the phenomena under study in the process of professional training of future vocational teachers in both technical and pedagogical disciplines. The concept of "computer modeling" appears. R. Horbatiuk understands computer modeling as a method of scientific cognition based on the systemic transformation of matter and energy and designed to analyze or synthesize complex systems through the study of an ideal model by the subject of learning [1, p. 227].

Currently, computer modeling is classified by the following types: conceptual, informational, structural and functional, mathematical, and simulation.

Conceptual computer modeling is understood as a system of representations in the minds of future specialists about the object under study. Such models are created based on existing knowledge about the object, its properties, characteristics, or on the basis of the subject's experience and analogies or logical conclusions. In the system of professional training, such models are used to teach students about processes and management systems.

Information computer modeling is based on the use of an information model that is multidirectional in nature (databases, information retrieval systems, automated control systems (ACS), computer-aided design (CAD) systems, etc.) and employs a large selection of special languages. The peculiarity of using such models is the use of relatively simple algorithms for searching and selecting data by relevant criteria and sorting them, which makes such models highly specialized. As a rule, in the system of professional training for future vocational teachers, it is advisable to use them in the process of studying disciplines related to information technology, computer graphics, and WEB technologies, such as "Engineering and Computer Graphics," "New Information Technologies," "Digital Technologies in the Professional Activity of a Teacher," etc.

The next type is structural and functional computer modeling, characterized by a conditional image of the original object, system, or processes described using interconnected tables, flowcharts, drawings, graphs, diagrams, animations, etc. With the help of this type of modeling, graphical or graphoanalytic models are built using computer graphics.

Graphical models include graphs, charts, and diagrams that can be used in studying any professional discipline, such as Tractors and Cars, Traffic Rules and Safety, Agricultural and Land Reclamation Machines, Fuel and Lubricants, etc. Such models are abstract representations of all their structural components, which must be formally described elements.

Graph-analytical models of structural-functional computer modeling include various geometric structures or their interpretations, i.e., all types of existing graphs. They are used by scientists as a tool at the stage of forming any (analytical, algorithmic, or simulation) model. Today, the use of such models with the help of computer tools has become widespread in the study of disciplines such as "Technical Mechanics," "General Electrical Engineering," "Electric Drive and Use of Electricity in Agriculture," etc.

Simulation computer modeling is understood by scientists as a special form of an ideal mathematical model used to study an object, system of objects, processes, and algorithms of their functioning, which are close in their characteristics to the original, as well as external influences on them. R. Horbatiuk, I. Pavkh, and I. Lutsyk believe that simulation modeling is a means of improving the professional training of future vocational teachers, as it maximally approximates real situations, contributes to the formation of professionalism in the student, and is appropriate because traditional teaching methods do not reduce the gap between the availability of knowledge and the lack of skills to solve professionally oriented problems [2, p. 147].

It should also be noted that this type of modeling, unlike other types of computer modeling, is recommended for students to use when studying phenomena, processes, and laws of nature and technological systems [2, p. 148]. Simulation modeling in the system of vocational education is most widely used in the process of studying the disciplines "Technical Mechanics," "General Electrical

Engineering," "Electric Drive and Electricity Use in Agriculture," "Automation of Technological Processes in the Agroindustrial Complex," etc.

Most researchers understand computer modeling as the process of building a mathematical model of an object or process for further study and analysis. Computer modeling is based on a computational or computer experiment in which the properties of an object or phenomenon are studied by solving a problem in the form of a mathematical model of this phenomenon or object using computer technology. I. Kravchenko and V. Mykytenko note that such an experiment will never replace a natural experiment. Computer modeling does not completely solve the problem due to absolute or relative errors, but it provides the researcher with a powerful tool for solving it [4, p. 25]. Therefore, they see the future in a reasonable combination of natural and computer experiments.

Thus, the essence of computer modeling is to obtain qualitative and quantitative results of a mathematical model. Mathematical modeling is understood by researchers as the process of replacing a system with a mathematical model and implementing it based on the developed algorithm [4, p. 14]. Mathematical models allow for the formation (synthesis) of system structures in the reproduction of functioning processes to assess their characteristics and properties.

A mathematical model is understood as any mathematical description that reflects with the required accuracy the structure or process of functioning of a real system under the relevant conditions. Today, mathematical modeling is indispensable for scientists in the design and implementation of modern scientific and technological innovations. Its combination with computer experimentation increases the efficiency and quality of scientific research, facilitating and accelerating the modeling of complex objects and processes [5, 7, 8].

The process of mathematical modeling is characterized by categories such as hypothesis, induction, deduction, abstraction, and analogy [5]. Considering this, the ability to build mathematical models should be regarded as an important condition for forming the professional competence and high level of professional training of future vocational teachers.

In the process of studying the disciplines within the professional training cycle, the method of mathematical modeling is widely used in laboratory and educational scientific research, such as during the implementation of calculation and practical tasks, laboratory work, and writing term papers. The expediency of using this method is explained by the fact that it allows for the study of objects or processes that are difficult to study through traditional natural experiments [3]. For example, in the discipline "Electric Drive and the Use of Electricity in Agriculture," this method is used in laboratory classes to study the operating and emergency modes of electric machines; starting and protective equipment in emergency modes or in case of equipment overload; technological processes of post-harvest grain processing; and the operation of automatic driving mechanisms of agricultural machinery.

When studying pedagogical disciplines, such as "Methods of Vocational Education" or "Fundamentals of Pedagogical Research," mathematical modeling provides an opportunity to obtain qualitative and quantitative results from a physical or computer model. Qualitative indicators allow the identification of the properties of the system of professional training of future vocational teachers, such as structure, dynamics of development, and sustainability. Quantitative indicators predict the effectiveness of the system as a whole.

Thus, the purpose of constructing a mathematical model for computer simulation may vary, but the modeling process itself is the main procedure of system analysis. Scientists define it as a set of methodological tools that guide the decision-making process in alignment with the initial task of the study. The created computer model of the system under study should reflect the main factors and relationships characteristic of real objects, situations, and criteria. It should be universal to ensure an approximate description of the object under study and to perform the necessary calculations.

Let us consider in more detail the peculiarities of using computer mathematical modeling in the training of future vocational teachers specializing in 015.37 Vocational Education (Agricultural Production, Processing of Agricultural Products, and Food Technologies) in the discipline "Electric Drive and Use of Electricity in Agriculture" at Oleksandr Dovzhenko Hlukhiv National Pedagogical University.

We used this method during full-scale and virtual experiments in laboratory classes, from the creation of a virtual stand to the experiment itself. It involves finding the dependence between the parameters of the object or process under study based on the values of the experimental parameters, by deriving a mathematical equation.

At the beginning of an experiment, it is often necessary to perform a mathematical calculation to determine the actual parameters of a machine or process for further research. This necessity arises because some laws in textbooks are written in mathematical form and cannot be applied in practice without adjustment.

For example, when studying the topic "Mechanical Characteristics of the Electric Drive" in the discipline "Electric Drive and the Use of Electricity in Agriculture," students are tasked with constructing the natural mechanical and electromechanical characteristics of an independently excited DC motor under its permissible load. These characteristics are based on the following:

equation of mechanical
$$n = \frac{U}{C_e \Phi} - \frac{M \cdot R_a}{\left(C_e \cdot C_{_M} \cdot \Phi\right)^2}$$
 (1),

and electromechanical characteristics of a DC motor [5, 7]:

$$n = \frac{U - I_a \cdot R_a}{C \cdot \Phi} \tag{2}.$$

To build these characteristics and determine the permissible load, future specialists need to calculate several equation parameters. By studying the technical literature, they must determine the proportionality coefficient (C_M) between torque (M), current (I), magnetic flux (F), and electromotive force coefficient (Φ) through the equation of the armature electromotive force (C_e) on the natural and artificial characteristics at the rated current value. As a result of mathematical transformations, students independently derive the equations of natural mechanical and electromechanical characteristics specific to their studied DC motor [O]:

equation of natural mechanical characteristic:

...
$$n = 1673 - M \cdot 105,97$$
 (3);

equation of natural electromechanical characteristic

$$I_a = \frac{M}{1,2558} \tag{4}.$$

After determining the torque on the motor shaft in the rated load mode and the rated torque, students calculate the coordinates of the characteristics with a torque step of $(0-1,2)M_{HOM}$. The data obtained during the mathematical calculation is verified on a test bench with the engine under study. The parameters obtained during the experiment are recorded in a report and compared with the calculated ones.

The advantage of using the mathematical modeling method is that, as a result, students receive the operational law of the engine under study expressed by equations (3) and (4). These derived equations of mechanical and electromechanical characteristics become the basis of the virtual testbed program, allowing the testing of both working hypotheses and the engine's operation under emergency modes and overloads. By analyzing the obtained dependencies, future vocational educators draw conclusions about refuting or confirming the hypothesis.

The application of the above method within the research approach in the study of professional disciplines enables students to master the process of modeling objects and processes for further study. As knowledge accumulates, the created model is adjusted with newly acquired information. This continual improvement leads to a more realistic representation of the actual object or process under study. Thus, the quality of the created computer mathematical model reflects the level of professional competence of the future vocational teacher. The more similar the created model is to the real object or process in its physical and mechanical parameters, the more developed their professional competence is.

In the course of studying the disciplines "Fundamentals of Electrical Engineering," "Electric Drive and Use of Electricity in Agriculture," and "Automation of Technical Processes in Agriculture," simulation computer modeling can also be used for drawing up electrical circuits using graphic

editors. Application software such as Electronics Workbench, LabVIEW, EDISON Cloud, MatLAB, and Multisim can be utilized. These software environments use a mathematical model of virtual devices that simulates the structural and functional principles of real devices. They are powerful tools for creating and studying virtual models, synthesizing, and analyzing automatic control systems for real objects.

It should be noted that the use of computer modeling in the professional training of future vocational teachers should be based on a reasonable combination of virtual and full-scale experiments to obtain reliable results and expand the educational and experimental capabilities of students, rather than using computer-based learning tools for their own sake.

For example, the Electronics Workbench package is designed to model and analyze electrical circuits. This package allows you to build models of real electrical circuits with a high degree of accuracy.

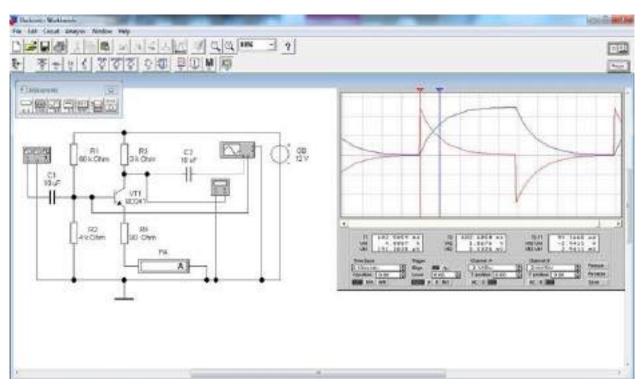


Fig. 1. The Electronics Workbench program window with a virtual model of a printed circuit board (Oleksandr Dovzhenko Hlukhiv National Pedagogical University)

The user interface of this program consists of a title bar, a menu bar, toolbars, a workspace, and a status bar. It also contains the following components:

- File menu: This menu section allows the user to work with files (open, create, print files, etc.).

- Edit menu: This section allows you to edit and work with the current document. The options in this section enable you to copy, delete, and move elements or blocks of the diagram. In addition, you can customize the visual parameters of the diagram (location and orientation of the diagram elements, color and font settings, search, and other standard functions).
- Circuit menu: A section that allows you to rotate, change properties, and zoom in and out of the diagram elements.
 - Analysis menu: This section is used for various circuit analyses.
- Window menu: This section is used to customize the screen settings when working with documents.
- Help menu: This section is used to access the Electronics Workbench help system.

Fig. 1 shows the Electronics Workbench program window with a virtual model of a printed circuit board. It allows you to conduct a comprehensive analysis of the built electrical circuit for operability, visualizing modeling results both in numerical form and as graphs of dependencies of various quantities.

In forming the professional competence of future vocational teachers in the process of graphic training for the discipline "Engineering and Computer Graphics," applied software tools such as AutoCAD and Autodesk 3ds Max can be used (Fig.2).

These include software tools adapted for use in the educational process, as well as programs developed for the needs of computer modeling in production. In accordance with the classification of geometric models, we have divided computer modeling software into two groups: for creating two-dimensional flat models (AutoCAD, SolidWorks) and for creating three-dimensional (3D) models (Autodesk 3ds Max, AutoCAD, SolidWorks, Pro/Engineer).

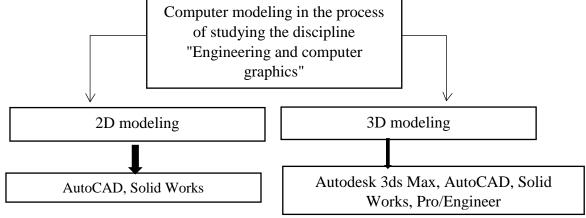


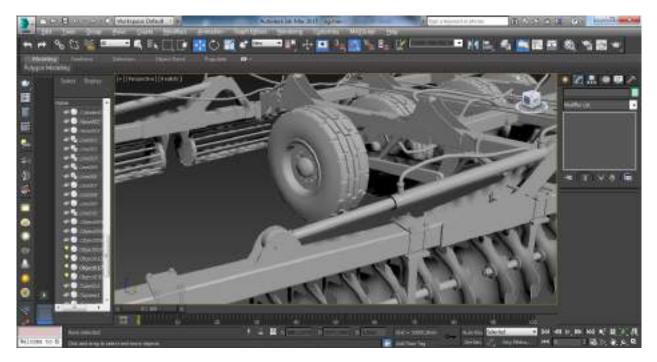
Fig. 2. The system of using computer modeling software in the study of the discipline "Engineering and Computer Graphics" (Oleksandr Dovzhenko Hlukhiv National Pedagogical University)

The presented system of using computer modeling software is employed during students' laboratory work and lectures, where theoretical material is demonstrated through problem-solving tasks and scenarios. For instance, in laboratory classes for the discipline "Engineering and Computer Graphics," future vocational teachers engage in tasks related to three-dimensional modeling of objects and develop proficiency in using auxiliary geometry in 3D mode (employing auxiliary points, axes, planes, and surfaces). They perform these exercises on computers to construct graphic models, components, and mechanisms, thereby enhancing their skills and achieving automation.

Modern 3D systems such as Autodesk 3ds Max and SolidWorks offer effective modeling tools capable of creating intricate three-dimensional models of complex mechanisms and assemblies. Autodesk 3ds Max, in particular, is renowned as one of the premier 3D modeling packages due to its extensive plugin support and diverse application capabilities. Its strength lies in the ease of 3D modeling of solid objects, the flexibility in model creation, and high-quality modules for photorealistic visualization. Recent versions of Autodesk 3ds Max also extend functionality beyond architectural models.

The program features a robust particle system and animation tools. With a sophisticated physics calculation mechanism, modeling the behavior of rigid and soft bodies is effortless. Users can control 3D models in accordance with real physics laws, achieving unparalleled realism. Let's outline the main and crucial features of this software tool. Primarily, the program excels in creating and editing 3D graphics, complementing created objects to imbue them with realistic appearances. It boasts numerous modifiers and tools for manipulating models, offering a comprehensive suite for various 3D object design needs.

- Polygonal modeling: This is the most common type of 3D modeling found in many
 3D graphics packages, capable of developing models of varying complexity.
- Instance-based modeling: Autodesk 3ds Max includes a built-in library of standard objects known as instances, often used as the starting point for model creation, with various modifiers applied to these instances.
- Based on splines: This fundamental modeling method involves constructing a product
 framework from three-dimensional curves (splines), used to generate the 3D object itself.



a

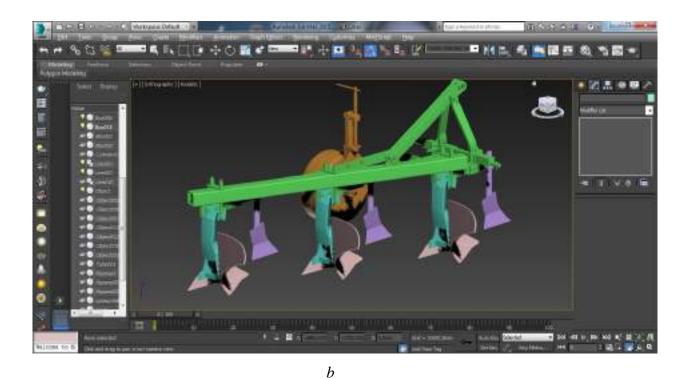
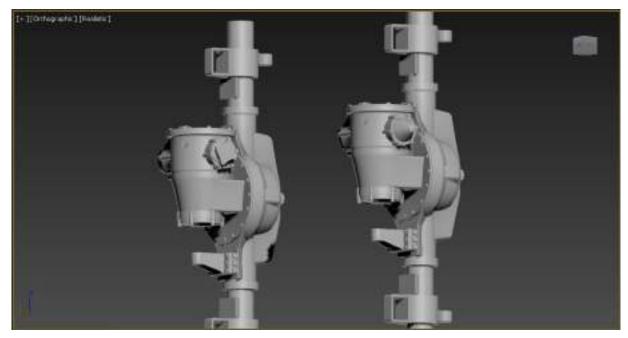
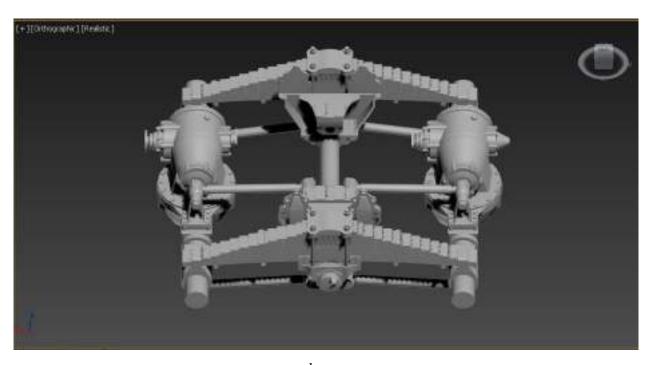


Fig. 3. Use of Autodesk 3ds Max software in laboratory classes in the discipline "Agricultural and Land Reclamation Machines": a – creation of a 3D model of a disk harrow; b – creation of a 3D model of a PLN-3-35 plow (*Oleksandr Dovzhenko Hlukhiv National Pedagogical University*).

 Based on NURBS curves. NURBS, or Non-Uniform Rational B-Spline, is a special technology for developing 3D models, ideal for modeling organs and objects with smooth surfaces. Based on the Bezier surface. This method of 3D modeling utilizes Bézier curves,
 typically applied to individual parts of 3D models where a network of control points is created. These
 control points allow the surface to be stretched in any direction.



a



b

Fig. 4. Use of Autodesk 3ds Max software in laboratory classes for the discipline "Tractors and Cars": a – during the study of the design of drive axles of cars; b – during the study of types of suspensions of drive axles of cars (*Oleksandr Dovzhenko Hlukhiv National Pedagogical University*).

By employing visual methods to create three-dimensional elements, we not only enable students to thoroughly study the object of interest but also to design it using a comprehensive range of scientific knowledge in the field. Furthermore, the design process often mirrors the technological process of manufacturing a part or unit (see Fig. 3 and Fig. 4).

The consolidation of these acquired skills and abilities occurs through their application in professional contexts, particularly in laboratory classes for integrated professional disciplines such as "Technical Mechanics," "Tractors and Cars," and "Agricultural and Land Reclamation Machines." Students also undertake individual tasks within these disciplines, further enhancing their proficiency.

The study of such integrated disciplines forms the foundation of professional training in the specialty 015.37 Vocational Education (Agricultural Production, Processing of Agricultural Products, and Food Technologies). Therefore, the primary distinction between these courses and others in the training of future vocational teachers lies in the experimental nature of their laboratory classes.

Thus, today, a full-scale experiment in the process of studying the above disciplines can be supplemented and expanded by using various types of computer modeling.

We agree with R. Horbatiuk [1, p. 228] regarding the main qualities of using computer modeling in the process of professional training of future vocational teachers, but it should be clarified that this is effective only if based on a mathematical model of the object or process under study:

- -Combining theoretical knowledge with practical knowledge in conditions that closely simulate the future professional environment, thereby increasing the cognitive interest and motivation of students to learn the material.
- -Consolidating knowledge gained during the study of pedagogical and professional components of vocational training.
 - Developing practical skills of a professional nature.
- -Forming professional and personal qualities of future vocational education teachers (such as endurance, discipline, conscientiousness, responsibility, self-development, and self-control, among others).

Among the main advantages of using computer modeling in the training of future vocational teachers, scientists particularly highlight:

- -Lower cost of experiments using computer tools compared to full-scale experiments on laboratory equipment.
- Simulation of processes that allows the demonstration and observation of system operation and its components under conditions closely resembling reality.
 - Ability to repeat experiments multiple times with computer tools, starting from any stage.

It is worth noting that the latter advantage is significant for computer modeling, as it allows for temporarily suspending and resuming experimental research to analyze results and make decisions

on adjusting model input parameters. Unlike with full-scale experiments, this flexibility supports the use of sequential and heuristic methods that are typically challenging to implement under conventional experimental conditions.

When selecting computer simulation tools used in the process of training future vocational teachers, it is essential to consider their compliance with didactic principles, particularly [1, p. 229]: scientific content of educational material; accessibility; clarity; systematicity and consistency; creative activity and independence; individual approach; connection of theory with practice; polytechnicism and professional orientation; strength of learning outcomes and development of students' cognitive abilities; and accounting for psychological and pedagogical features of students.

Conclusions

Thus, the use of computer modeling will allow for the more effective organization of the educational process in the conditions of distance and blended learning. It also enhances the level of professional competence among future vocational teachers and prepares them for professional activity.

The process of building computer models is logically integrated into the content of a laboratory or practical lesson, enabling teachers to comprehensively demonstrate all the properties of the object under study and apply the latest, non-traditional educational activities. In the training of future vocational teachers, the modeling method can serve as the primary tool for learning about objects, phenomena, technological, and production processes, particularly in cases where conducting a natural experiment in real conditions is not feasible.

Література

- 1. Горбатюк Р. Комп'ютерне моделювання у підготовці майбутніх інженерів-педагогів до професійної діяльності // Інформаційні технології у трудовому та професійному навчанні: Наукові записки. Серія: Педагогіка. № 3. 2009, с. 226-233.
- 2. Горбатюк Р. М., Павх І. І., Луцик І. Б. Застосування інформаційних технологій у процесі професійної підготовки інженерів-педагогів // Наукові записки Тернопільського національного педагогічного університету імені Володимира Гнатюка. Серія: Педагогіка. № 7 2006. с. 144—149.
- 3. Ковальчук В. І., Ігнатенко С. В., Росновський М. Г., Ігнатенко Г. В., Вовк Б. І., Опанасенко В. П., Самусь Т. В., Ігнатенко О. В. *Підготовка майбутніх педагогів професійного*

- навчання на засадах компетентнісного підходу : кол. монографія / за наук. ред. В. І. Ковальчука. Глухів: Глухівський НПУ ім. О. Довженка, 2020. 221 с.
- 4. Комп'ютерне моделювання: процеси і системи: підручник для здобувачів ступеня бакалавра за спеціальністю 151 «Автоматизація та комп'ютерно-інтегровані технології» / І. В. Кравченко, І. В. Микитенко, Г. С. Тимчик. Київ : КПІ ім. Ігоря Сікорського, 2022. 215 с.
- 5. Опанасенкко В. П., Самусь Т. В. Реалізація проектної технології під час вивчення педагогами професійного навчання технічних дисциплін циклу професійної підготовки / Опанасенкко В. П., Самусь Т. В. // Наукові інновації та передові технології (Серія «Педагогіка»). 2022. № 9(11) С. 167-178.
- 6. Радкевич В. О. *Економічна ефективність професійної підготовки кваліфікованих робітників: проблеми, пошуки, перспективи* / В. О. Радкевич // Науковий вісник Інституту професійно-технічної освіти НАПН України. Професійна педагогіка. 2012. №4. С. 19-27.
- 7. Самусь Т. В. Особливості організації самостійної роботи педагогів професійного навчання під час вивчення дисципліни «Електропривод та використання електроенергії в сільському господарстві» / Т. В. Самусь, В. П. Опанасенко// *Технологічна і професійна освіта: проблеми і перспективи:* Матеріали III Міжнародної науково-практичної конференції (м. Глухів, 21 жовтня 2022 р.) Глухів: Глухівський НПУ ім. О. Довженка, 2022. С. 286 290.
- 8. Самусь Т. В. Цифрова трансформація професійної підготовки майбутніх педагогів професійного навчання в умовах змішаного навчання. *«Наука і техніка сьогодні (Серія «Педагогіка»)»:* журнал. 2024. № 5 (33) 2024.
- 9. Самусь Т. В., Опанасенко В. П. Формування професійної компетентності майбутніх педагогів професійного навчання засобами комп'ютерного моделювання. *«Перспективи та інновації науки» (Серія «Педагогіка»):* журнал. 2024. № 6 (40) 2024. С. 415 426.
- 10. Vitalii Opanasenko, Tetiana Samus. Model of formation of research competence of teachers of professional education in the process of their professional training. *Innovative approaches to ensuring the quality of education, scientific research and technological processes*: Series of monographs Faculty of Architecture, Civil Engineering and Applied Arts Katowice School of Technology / Edited by Magdalena Gawron-Łapuszek, Yana Suchukova. Katowice: Wydawnictwo Wyższej Szkoły Technicznej w Katowicach, 2021, 779-786c.

References:

1. Horbatiuk R. (2009). Komp"yuterne modelyuvannya u pidhotovtsi maybutnikh inzhenerivpedahohiv do profesiynoyi diyal'nosti [Computer modeling in the preparation of future engineerpedagogues for professional activity]. *Informatsiyni tekhnolohiyi u trudovomu ta profesiynomu*

- navchanni: Naukovi zapysky. Seriya: Pedahohika Information technologies in labor and professional education: Scientific notes. Series: Pedagogy, 3, 226-233. [in Ukrainian].
- 2. Horbatiuk, R. M., Pavkh, I. I., Lutsyk, I. B. (2006). Zastosuvannya informatsiynykh tekhnolohiy u protsesi profesiynoyi pidhotovky inzheneriv-pedahohiv [Application of information technologies in the process of professional training of teacher engineers]. *Naukovi zapysky Ternopil's'koho natsional'noho pedahohichnoho universytetu imeni Volodymyra Hnatyuka. Seriya: Pedahohika Scientific notes of Ternopil National Pedagogical University named after Volodymyr Hnatyuk. Series: Pedagogy,* 7, 144-149. [in Ukrainian].
- 3. Koval'chuk V. I., Ihnatenko S. V., Rosnovs'kyj M. H. (2020). Pidhotovka majbutnikh pedahohiv profesijnoho navchannia na zasadakh kompetentnisnoho pidkhodu [Pidhotovka majbutnikh pedahohiv profesijnoho navchannia na zasadakh kompetentnisnoho pidkhodu] : kol. monohrafiia. Hlukhiv, 2020. 221 P. [in Ukrainian].
- 4. Kravchenko, I. V., Mykytenko, I. V., Tymchyk, H. S. (2022). Komp'yuterne modelyuvannya: protsesy i systemy [Computer modeling: processes and systems]. Kyiv: KPI im. Ihoria Sikorskoho [in Ukrainian].
- 5. Opanasenkko V. P., Samus T. V. (2022). Realizatsiya proektnoyi tekhnolohiyi pid chas vyvchennya pedahohamy profesiynoho navchannya tekhnichnykh dystsyplin tsyklu profesiynoyi pidhotovky [Implementation of project technology during the study by teachers of professional training of technical disciplines of the professional training cycle]. Naukovi innovatsiyi ta peredovi tekhnolohiyi (Seriya «Derzhavne upravlinnya», Seriya «Pravo», Seriya «Ekonomika», Seriya «Psykholohiya», Seriya «Pedahohika») Scientific innovations and advanced technologies ("Public Administration" Series, "Law" Series, "Economics" Series, "Psychology" Series, "Pedagogy" Series), 9(11), 167-178. [in Ukrainian].
- 6. Radkevych V. O. (2012). Ekonomichna efektyvnist' profesiynoyi pidhotovky kvalifikovanykh robitnykiv: problemy, poshuky, perspektyvy [Economic efficiency of professional training of skilled workers: problems, searches, prospects]. Naukovyy visnyk Instytutu profesiynotekhnichnoyi osvity NAPN Ukrayiny. Profesiyna pedahohika Scientific Bulletin of the Institute of Vocational and Technical Education of the National Academy of Sciences of Ukraine. Professional pedagogy, 4, 19-27. [in Ukrainian].
- 7. Samus T. V., Opanasenko V. P. (2022). Osoblyvosti orhanizatsii samostiinoi roboty pedahohiv profesiinoho navchannia pid chas vyvchennia dystsypliny «Elektropryvod ta vykorystannia elektroenerhii v silskomu hospodarstvi». [Peculiarities of the organization of independent work of vocational training teachers during the study of the discipline "Electric drive and use of electricity in agriculture"]. *III Mizhnarodna naukovo-praktychna konferentsiia* «Tekhnolohichna i profesiina osvita: problemy i perspektyvy» III International Scientific and

Practical Conference "Technological and Professional Education: Problems and Prospects"., (pp. 286-290). Hlukhiv: Hlukhivskyi NPU im. O. Dovzhenka [in Ukrainian].

- 8. Samus T. V. (2024). Tsyfrova transformatsiya profesiynoyi pidhotovky maybutnikh pedahohiv profesiynoho navchannya v umovakh zmishanoho navchannya [Digital transformation of professional training of future teachers of vocational education in the conditions of mixed education]. *Nauka i tekhnika s'ohodni (Seriya «Pedahohika») Science and technology today (Series "Pedagogy")*. 5 (33), 2024 [in Ukrainian].
- 9. Samus T. V., Opanasenko V. P. (2024) Formuvannya profesiynoyi kompetentnosti aybutnikh pedahohiv profesiynoho navchannya zasobamy komp″yuternoho modelyuvannya. [Formation of professional competence of future teachers of vocational education by means of computer simulation]. *Perspektyvy ta innovatsiyi nauky (Seriya «Pedahohika») − Perspectives and innovations of science (Series "Pedagogy")*. № 6 (40) C. 415 − 426. [in Ukrainian].
- 10. Vitalii Opanasenko, Tetiana Samus (2021). Model of formation of research competence of teachers of professional education in the process of their professional training. *Innovative approaches to ensuring the quality of education, scientific research and technological processes:* Series of monographs Faculty of Architecture, Civil Engineering and Applied Arts Katowice School of Technology / Edited by Magdalena Gawron-Łapuszek, Yana Suchukova. Katowice: Wydawnictwo Wyższej Szkoły Technicznej w Katowicach, 779-786.

PSYCHOLOGICAL SUPPORT OF PRESCHOOLERS IN THE CONDITIONS OF WAR IN UKRAINE

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Summary

The article highlights the basic aspects of psychological support for preschoolers in the

conditions of war in Ukraine. Emphasis has been shifted to issues that require the attention of

specialists (psychologists, teachers, social and medical workers) regarding theoretical and practical

research on the issue.

The author analyzed the directions of psychological support in conditions of irrational

challenges. The legislative and regulatory documents regulating the activities of preschool

educational institutions in wartime conditions were considered; a source analysis of the theoretical

base of the researched issue was carried out; it is summarized that the main vectors of the

comprehensive and harmonious development of a preschool child are socialization; the essence of

the definition of «psychological support» is revealed.

The article provides effective methods of psychological support for preschoolers: fairy-tale

therapy, art therapy, body-oriented method, method of creating sand compositions, game method. A

review of resources (national psychological support hotlines, online platforms and resources) that

operate at the state level to support preschool children and preserve their psychological health was

conducted.

Key words: psychological support, preschoolers, war.

Introduction

In the conditions of a full-scale war, every citizen of Ukraine, regardless of age or location

(temporarily occupied territories, border areas), is in a state of constant psychological stress.

Hostilities, threats to security, loss of loved ones and destruction of homes are the reasons for this.

Preschool children are particularly vulnerable to such stressors, which can have long-term negative

consequences for their mental health. Experiencing traumatic events such as bombings, evacuations,

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separation from family or friends can cause symptoms of post-traumatic stress disorder, anxiety disorders and depression in children.

Preschool children do not yet have developed mechanisms of self-regulation of emotions and need the help of adults in order to recognize, express and manage their emotions. Psychological support helps to prevent or minimize these consequences, as it promotes the development of social interaction skills in children: cooperation, empathy, conflict resolution and establishing friendly relationships; helps children adapt to new realities, providing a sense of security and stability.

The relevance of the researched issue is evidenced by Letter of the Ministry of Education and Culture No. 1/3845-22, dated 02.04.22 «On Recommendations for Employees of Preschool Educational Institutions During the Period of Martial Law in Ukraine», which includes the following appendices:

- «Methodical Recommendations for the Implementation of Educational Activities on Preschool Education During the Period of the Legal Regime of Martial Law» (Appendix 1);
- «Regarding the Implementation of Measures to Protect Pupils During the Educational Process in the Conditions of Martial Law and Emergency Situations» (Appendix 2);
 - «Action Plan of a Preschool Teacher in the Event of an Emergency» (Appendix 3).

Letter of the Ministry of Education and Culture No. 1/3845-22, dated April 2, 2022 states: «The introduction of martial law in Ukraine affects all spheres of human life. The educational sector, in particular preschool, is undergoing special changes. In a state of war, children of preschool age belong to the most vulnerable category of the population. Being in danger, in a prolonged state of stress, the child is deprived of normal conditions for development and education. Due to the feeling of anxiety, tension, fear, uncertainty, the process of full socialization of the child is complicated. Children who are forced to be relocated from the zone of active hostilities face the problem of social adaptation, being in new social conditions [3].

Answers to questions regarding the organizational aspects of preschool educational institutions are provided by the following regulatory documents: Law of Ukraine «On the Organization of Labor Relations in Martial Law», dated March 15, 2022 No. 2136-IX; letter of the Ministry of Education and Culture No. 1/3475-22, dated March 17, 2022 «On Enrolling Internally Displaced Children in Preschool Educational Institutions»; you can find out about the provision of psychological support for the participants of the educational process in the conditions of martial law from the letter of the Ministry of Education and Culture No. 1/3737-22, dated March 29, 2022; the issue of the organization of the educational process in educational institutions is regulated by the letter of the Ministry of Education and Culture No. 1/3371-22, dated 03.06.2022 «On the Organization of the Educational Process in Conditions of Military Operations».

In addition, the Basic Component of Preschool Education (2021), as a standard of preschool education, establishes the state policy in the field of preschool education and preschool educational institutions must meet its requirements even during martial law [1]. The specified documents testify to the urgency of the issue.

The analysis of scientific research shows that the issue of psychological support is studied by scientists from different aspects. Thus, the problems of children's adaptation to a preschool educational institution are highlighted in the works of A. Bohush, N. Vatutina, N. Havrysh, O. Kononko, H. Levytska, Zh. Matsenko, O. Okereshko, L. Strezh, I. Tereshchenko.

The scientific and theoretical basis of the development of psychological service in the educational system is the research of such famous scientists: A. Furman, V. Panok, A. Obukhivska, V. Ostrova, I. Zahurska, S. Ladyvir, O. Vasylieva.

The issue of psychological support for children is revealed in the works of: V. Zinchenko, L. Hrechko, O. Babyak, I. Ovcharenko, O. Tokhtamysh, H. Herylo, T. Hnida, Yu. Korniienko, Yu. Lutsenko, L. Hrytsyk, M. Mushkevech.

Проблемі психологічного супроводу дітей дошкільного віку в умовах війни в Україні присвятили свої наукові розвідки такі вчені як:

Scientists such as: D. Pokhylko, T. Kochubei, V. Kuz, L. Ishchenko, V. Zinchenko, S. Shkarlet, Ye. Pidchasov devoted their scientific researches to the issue of psychological support for preschoolers in wartime conditions in Ukraine [2].

Therefore, the topic is relevant and important and needs detailed research.

Purpose, subject and research methods

The purpose of the article «Psychological Support of Preschoolers in the Conditions of War in Ukraine» is to study and analyze modern approaches to the psychological support of preschooler who are experiencing military operations. The article is aimed at defining the main problems related to the psychological state of preschoolers, describes effective methods and means of psychological support, as well as highlighting the importance of creating a safe and supportive environment for preschool children in the conditions of the Russian-Ukrainian war.

The subject of the article «Psychological Support of Preschoolers in the Conditions of War in Ukraine» is a study of the psychological characteristics and needs of preschool children who are affected by the war.

In the process of preparing the material, we used theoretical methods of scientific research: analysis, synthesis, generalization.

Research results

Before going to the essence of the question, let's dwell on the key definition of the defined concept. The etymology of the term «psychological support» is subject to different interpretations. Thus, L. Prokhorenko, O. Babiak, N. Batasheva note that psychological support is a complex system of versatile, dynamic, corrective and developmental assistance in accordance with the age and individual needs of children [8]. In this context, huge convictions are accumulated on psychological support – because it is not only about classical diagnosis, but also about systematic correction and rehabilitation, social assistance for every child, regardless of the form of education, educational institution, as well as about the system of methodical assistance to families.

The concept of «accompanying» is close in meaning to assistance, joint movement, help of one person to another in overcoming difficulties. In V. Dahl's dictionary, accompaniment is interpreted as an «action based on the verb to accompany», i.e. «to escort, accompany, go together with the purpose of guiding, following».

Yu. Sliusarev used the term «support» to denote a non-directive form of providing psychological assistance aimed «not just at strengthening or improvement, but at the development and self-development of the individual's self-awareness», assistance that triggers self-development mechanisms and activates a person's own resources. Many researchers note that accompaniment «implies the support of naturally developed reactions, processes and states of the individual». Moreover, successfully organized psychological support opens up prospects for personal growth, helps a person to enter the «zone of development» that is not yet accessible to him [6].

We pay special attention to the interpretation of the concept of «psychological support» by such leading domestic scientists in the field of special psychology as T. Sak, V. Kobylchenko, T. Kalinina, V. Sokolov, H. Sokolova. In particular, T. Sack considers psychological support as a process of diagnosis and correction of a child's mental development. At the same time, not only the features of dysontogenesis are monitored, but also the preservation of the component of the mental sphere, which will serve as a basis for compensation in the process of targeted corrective influence [9].

The purpose of psychological support is focused on the objective study of the personal potential of individuals (children of preschool age), in particular in the interdependence of the level of cognitive development and age norms, the development of the intellectual sphere, the formation of motivation for activity, readiness for learning, specific characterological features, etc., which primarily involves the involvement all participants of the educational process (parents, teachers, children, staff of the preschool education institution) to the implementation of pre-planned or planned actions [5].

We will highlight the main, in our opinion, factors influencing the psychological state of a preschool child: family environment, safety and stability, social support and interaction, physical health. These factors interact and influence the psychological state of the child, contributing to its development and personality formation. But in the conditions of war, when children feel constant fear for their life and safety, there are additional factors affecting the psychological state of preschool children, such as: fear and anxiety, separation from loved ones, injuries and losses, shortage of vital resources (food, water, medicines and other necessary things), social isolation, media influence. These factors of psychological impact can increase the negative impact in the conditions of war. To reduce this impact, it is crucial to provide children with a stable environment, support and safe conditions, as well as to provide them with psychological support and assistance.

Let's consider the methods of psychological support of preschool children. They are divided into: methods of pedagogical protection, methods of care and methods of reinforcement aimed at the development of physical and mental health of preschool children.

The methods of pedagogical protection are: 1. a method of direct intervention in a conflict (for example, preventing a fight); 2. the «analysis» method (discussion of the conflict that has arisen, search for ways to resolve it); 3. the «rules» method (updating the preschooler's position to the problem in the team in accordance with the rules; collective development of the rules and their observance); 4. the «slowing down» method (not a ban, but a reduction or cessation of negative experiences and actions); 5. the method of «developing a joyful perspective» (overcoming existing fears, dangers emanating from others), etc.

The methods of caring for the child are:

- 1) the method of «pacification» changing an unpleasant situation into a positive one, in which the child would not lose his sense of self-worth; non-verbal (without words) means: hugs, handshakes, stroking, use of relaxing music;
- 2. the «analysis» method discussion with the child of actions, affective states that lead to danger for his health and life;
- 3. the «switching» method transferring the child's attention to other types of activities in which he can successfully cope with the negative feelings that have arisen (transferring aggression to permissible objects, for example, beating a pillow; creative action drawing something, sculpting;
- 4 the method of «optimism» a joint search for positive ways out of a problematic situation, further disclosure of ways of successful personality development, etc.

Reinforcement methods aimed at the development of physical and mental health of preschool children:

1) Story therapy – promotes the development of children not only such feelings as joy, sympathy, empathy, but also encourages speech relations, which helps us to work on problematic

behavior of children, to form in them the ability to communicate, to adapt safely in society, to overcome their fears, anxiety. Games, drawings, fairy tales are elements of the significant world of the child. Therefore, in working with children, the use of specially selected games, exercises, tasks, as well as drawing in many ways contribute to the harmonization and development of the child.

- 2) Art therapy is an independent direction, a specialized method based on art, primarily visual art. It is often used in children's creative activities when creating a personal creative product (appliqué, drawing, sculpting, construction, decorative and applied art, etc.). Through drawing, children express their feelings, emotions, attitude towards others and themselves.
- 3) The creation of sand compositions stimulates a person's imagination, allowing him to understand his own internal processes, which are considered in the symbolism of the landscape and miniature figures of people, animals, trees, buildings, cars, bridges, etc., chosen by a person. Building the heroes of the sand city, the child builds new relationships with himself. Through sand therapy, children relax, relieve stress, and find a way out of conflict situations.
- 4) Body-oriented method gives children information about the surrounding world through bodily sensations. The body-oriented method (hereinafter TOM), developed by I. Hanicheva and others reveals approaches to interaction with preschool children using body control.
- 5) The game method consists in helping the child to be more proactive, active in his own activities, to develop the ability to self-control, to gain a sense of faith in himself and his abilities. In the game, the child discovers what an adult has known for a long time. The game contributes to the upbringing and development of children, if it is included in the continuous pedagogical process [7].

In the process of organizing psychological support for preschoolers, it is necessary to adhere to the following principles: voluntariness, active participation of parents and relatives; respect and recognition of the value of the child regardless of real achievements and behavior; implementation of the child's right to receive educational services; an individual approach to the child, taking into account their needs and characteristics; system, complexity, availability of psychological and pedagogical services.

At the state level, various platforms have been created and are functioning to support the psychological health of preschool children in war conditions: national psychological support hotlines, online platforms and resources («Tell me», Zanovo online platform); webinars, video courses, interactive games and materials for working with emotions and stress are organized; educational programs and trainings for parents and educators; psychological services at educational institutions work.

Reforming the system of care and support for children, Ukraine relies on the world's leading experience, supported by successfully implemented initiatives. International organizations provide support in the creation and implementation of psychological assistance programs. The international

community is joining forces to ensure the right of every child in Ukraine to a family. Thus, an agreement was signed between the EU and UNICEF on support for the implementation of the reform of the care and support system for children in Ukraine. The international dialogue testifies to the steadfast intention of Ukraine and its international partners to protect the rights and interests of the most vulnerable members of society – children who need significant attention, a loving and caring family, especially in the conditions of a full-scale war of the Russian Federation against Ukraine [4].

The Lego Foundation has developed courses for improving the qualifications of teachers of preschool and general secondary education institutions (primary and basic school) «Well-being of children and teachers: effective tools and practices of psychosocial support». The main tasks of the program are: ensuring the development of the value attitude of teachers to the implementation of psychosocial support for children, in emergency situations, in particular, by means of learning through play; deepening and expanding the knowledge of teachers of preschool and general secondary education institutions (primary and basic school) in the theory and practice of the psychology of emergency situations, game pedagogy, effective strategies of psychosocial support for the development and education of a child in emergency situations, in particular by means of learning through play. The program was developed within the framework of the following projects: «Promotion of education» in preschool; support of the New Ukrainian School; introduction of modules and special courses on activity-based learning methods into educational programs of higher education institutions in accordance with the Memorandum of Understanding between the Ministry of Education and Science of Ukraine and The LEGO Foundation regarding cooperation in the field of education and science (2021).

In order to ensure a comprehensive approach with the aim of organizing psychological support for preschool children in wartime conditions in Ukraine, cooperation between educators of preschool education institutions and psychologists should be established. A psychologist who is a specialist in psychological support solves the tasks of prospective development and provides daily assistance to children and their parents, colleagues in an educational institution. First of all, the mental and personal development of the child is ensured; a favorable, development-oriented psychological climate is created, which is determined by productive communication, both in the microenvironment of peers and in the microenvironment of interaction between teachers and pupils. Thus, the psychological support specialist becomes responsible for creating and maintaining tolerant psychological conditions.

Psychological support, as an organizational structure, being represented by a specialist psychologist, is part of the teaching team of an educational institution, that is, in fact, psychological support is harmoniously integrated into the educational vertical. A high level of effectiveness of psychological support activities can be ensured only when all structural divisions of an educational

institution interact at the professional level. The analysis of the latest legal documents in the field of education makes it possible to outline the current tasks of psychological support of the educational process. Namely:

- psychological analysis of the social situation of development in educational institutions, identifying the main problems and determining the causes of their occurrence, ways and means of solving them, assisting the teaching staff in harmonizing the social and psychological climate in educational institutions;
- monitoring of the psychological and pedagogical status of the child and the dynamics of his psychological development;
 - promotion of individualization of the educational route;
- development and implementation of psychological programs aimed at overcoming deviations in social and psychological health;
- promoting the formation of universal educational actions in children as the subject's ability for self-development and self-improvement through the conscious and active assimilation of new social experience, a set of actions of the child that ensure his cultural identity, social competence, tolerance, the ability to independently learn new knowledge and skills, including the organization of this process;
- assisting teachers and parents in raising children, as well as forming in them the principles of mutual assistance, tolerance, mercy, responsibility and self-confidence, the ability to actively interact socially without limiting the rights and freedoms of another person;
- dissemination and introduction into the practice of educational institutions of achievements in the field of domestic and foreign psychology;
- interaction with educational institutions, institutions and organizations of health care and social protection of the population.

Thus, the task of psychological support at the level of preschool education is early diagnosis and correction of developmental disorders, ensuring the readiness of a preschool child for school.

We consider it necessary to note that psychological support today is not just the sum of various methods of corrective and developmental work with children, but acts as a complex technology, a special culture of support and assistance to the participants of the educational process in solving the tasks of development, learning, upbringing, and socialization. This assumes that a specialist in psychological support not only possesses the methods of diagnosis, counseling, and correction, but also has the ability to systematically analyze problem situations, program and plan activities aimed at solving them, co-organize for these purposes the participants of the educational process (the child, peers, parents, teachers, administration). A qualitatively conducted analysis will

allow to plan activities more clearly and improve the quality of services offered by the educational institution.

Psychological support is a professional activity because it is an effective interaction with the participants of the educational process. The means of diagnosis, prevention, corrective work, psychological and pedagogical education should be aimed at providing assistance to the child in solving the current problems of education, upbringing and socialization, and especially in the conditions of war in Ukraine.

Conclusions

Global geopolitical challenges faced by Ukrainian society require changes in many areas, in particular in the field of preschool education. Many preschool education institutions do not function, some accept temporarily/forcibly displaced persons, organize the educational process online, provide consultations to parents, etc. There are institutions that have been completely destroyed or are located in temporarily occupied territories. The present has made cruel corrections in the worldviews of preschoolers. They had a devastating experience of war: constant shelling, explosions, separation from their families, deaths. They know such words as: «bomb shelter», «air alert», «martial law», «silent mode», «blackout», «missile carriers», «anxiety backpack». In danger, unprotected space, prolonged stress, children of preschool age are deprived of adequate conditions for comprehensive development and education, their socialization becomes impossible. Millions of Ukrainian children are deprived of a happy childhood, and this is an unavoidable loss. Therefore, we are convinced that psychological support is a holistic system of influences that provide for the creation of an individual development program, the basis of which will be the formation of compensatory skills in ways of active activity as a leading condition for the step-by-step training of preschool children in atypical, non-standard conditions and circumstances, in particular, in conscious hard work elements of resilience to external/internal factors by explaining and arguing the situation that has developed.

So, the psychological support of preschool children in the conditions of the Russian-Ukrainian war consists in their active involvement in the educational process. Teachers and specialists in the field of preschool education face the need for a detailed study of the difficulties associated with the war and the determination of the most optimal, effective teaching methods.

Bibliography

- 1. Bazovyi komponent doshkilnoi osvity [Basic Component of Preschool Education] URL: http://surl.li/jiwf (application date 11.05.2024)
- 2. Beznosiuk, O., Bairak, I. Psykholoho-pedahohichnyi suprovid rozvytku osobystosti dytyny v umovakh voiennoho stanu [Psychological and Pedagogical Support for the Development of

- a Child's Personality in the Conditions of Martial Law] URL: http://surl.li/txpog (application date 11.05.2024)
- 3. Lyst MON Ukrainy vid 02.04.2022 № 1/3845-22 «Pro rekomendatsii dlia pratsivnykiv zakladiv doshkilnoi osvity na period dii voiennoho stanu v Ukraini» [Letter of the Ministry of Education and Culture of Ukraine dated April 2, 2022 No. 1/3845-22 «On Recommendations for Employees of Preschool Educational Institutions During the Period of Martial Law in Ukraine»] URL: http://surl.li/txpos (application date 11.05.2024)
- 4. Lysytsia, V. V., Konoplia, A. I. (2024). Rol shtuchnoho intelektu u vyshchii shkoli: perspektyvy ta nedoliky [The Role of Artificial Intelligence in Higher Education: Prospects and Shortcomings] materialy II Mizhnarodnoi naukovo-praktychnoi konferentsii dlia osvitian «Bereznevyi naukovyi dyskurs 2024» na temu «Determinanty posylennia roli osvity u povoiennomu vidnovlenni Ukrainy» (29 bereznia 2024 roku u dystantsiinii formi. m. Kyiv). S. 61-64 URL: http://surl.li/txrnx (application date 11.05.2024)
- 5. Lysytsia, V. V., Konoplia, A. I. (2024). Digital-portret vykhovatelia zakladu doshkilnoi osvity kriz pryzmu IKT [Digital Portrait of Preschool Teacher Through the Lens of ICT] Transformatsiia obliku ta biznes-konsaltynhu v umovakh nevyznachenosti: suchasni trendy, vyklyky, mizhnarodnyi dosvid: materialy Mizhnarodnoi naukovo-praktychnoi konferentsii 10 lystopada 2023 roku Kharkiv DBTU 2023. S. 210-211 URL: http://surl.li/txrsu (application date 11.05.2024)
- 6. Mushkevych, M. I. Poniattia suprovodu u suchasnii psykholohichnii nautsi [The Concept of Accompaniment in Modern Psychological Science] URL: http://surl.li/txptt (application date 11.05.2024)
- 7. Ozhohanych, V. P., Ivanova, V.V. Mukachivskyi derzhavnyi universytet. Formy, metody ta zasoby pedahohichnoho suprovodu ditei doshkilnoho viku z neblahopoluchnykh simei [Mukachevo State University. Forms, Methods and Means of Pedagogical Support for Preschoolers from Disadvantaged Families] URL: http://surl.li/txqje (application date 11.05.2024)
- 8. Prokhorenko, L. I., Babiak, O. O., & Batasheva, N. I. (2020) Psykholohichnyi suprovid ditei z osoblyvymy osvitnimy potrebamy: stratehiia realizatsii. [Psychological Support of Children with Special Educational Needs: Implementation Strategy] Visnyk Natsionalnoi akademii pedahohichnykh nauk Ukrainy, 2(1), 1-6. URL: https://doi.org/10.37472/2707-305X-2020-2-1-7-5
- 9. Sak, T. V. (2014) Dyferentsiiovanyi pidkhid do navchannia uchniv z osoblyvymy osvitnimy potrebamy. [The Differentiated Approach to Teaching Students with Special Educational Needs] Naukovyi chasopys NPU im. M. P. Drahomanova. Seriia 19: Korektsiina pedahohika ta spetsialna psykholohiia. 2014. Vyp. 26. S. 215–219

IMPLEMENTATION OF THE STUDENT-CENTERED APPROACH IN HIGHER EDUCATION (ON THE EXAMPLE OF EDUCATIONAL AND PROFESSIONAL PROGRAMS "CHEMISTRY. INFORMATICS" BACHELOR'S AND MASTER'S DEGREE PROGRAMS AT THE KRYVYI RIH STATE PEDAGOGICAL UNIVERSITY)

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The importance of education for the future of a person, nation and state cannot be overestimated. Since Ukrainians realized that they are part of a democratic, legal European family, the issue of reforming higher education to bring it closer to the European system in terms of its essence, structure and professional level of graduates has become a matter of urgency. The starting point for changing the direction of higher education development in Ukraine is considered to be 2005, when the country joined the Bologna Process, however, due to many unfavorable factors, including openly harmful political decisions of the authorities, the Covid-19 pandemic, and now the war against the aggression of the Russian Federation, the reform process has been very long and not effective enough. Nevertheless, positive changes in higher education in Ukraine continue and we are getting closer to European indicators every year. Thus, despite the extremely difficult and tragic events in the country, universities continue to work and develop: according to the results of the authoritative QS Europe Ranking, several Ukrainian higher education institutions (Taras Shevchenko National University of Kyiv, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute, V. N. Karazin Kharkiv National University) are among the top twenty Eastern European universities [1] - and this is after two years of terrible war and restrictions that all universities in the country have to work under.

The issues of solving the problems of effective implementation of higher education as the main supplier of intellectual professional competitive personnel who will be able to ensure innovative economic, social and cultural development of the Ukrainian state are raised in the works of many leading scholars of Ukraine and the world. A group of scientists led by O. Kysyliova in their monograph investigate the characteristics of the modern higher education system, new pedagogical concepts and technologies of teaching, standardization and intensification of the educational process. they reveal theoretical and methodological issues of organization of teaching and measurement and control of knowledge as the main condition for achieving the quality of modern higher education. [2]. The reasons for the insufficient quality of higher education and the search for ways to improve it are

revealed in the works of Moroz V., Moroz S., Movchan L., Trebin M., Batechko N., Kalinicheva N., Stebletsky A. and others. [3-8].

According to the vision of Professor Morozov's research group, the interconnection of individual elements of the higher education quality system has an extensive system. (Fig.1).

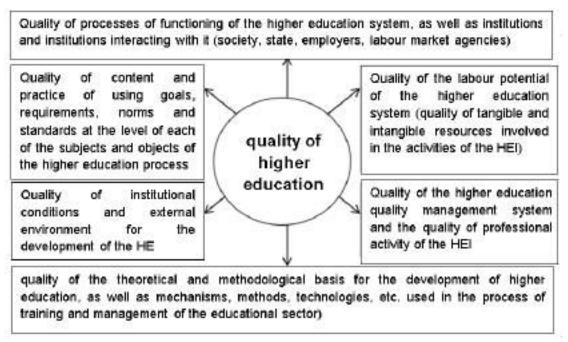


Figure 1. Components of higher education quality according to Professor Morozov . *Source:* [3].

A comparative analysis of quality assurance in higher education in Ukraine and European countries was conducted by Bilyakovska O., Klimova N. and others [9, 10].

The result of a scrupulous and multifaceted study by the scientific community of the state of higher education in Ukraine and the priority areas of its development was the formation of a strategy for the development of higher education for 2022-2023. On 23 February 2022, the Cabinet of Ministers of Ukraine approved the Strategy for the Development of Higher Education in Ukraine for 2022-2032 [11], which took into consideration both the positive and negative experience of the reform path already passed, global trends in the development of higher education in Europe and the world, strengths and weaknesses of the national higher education system, and opportunities for further development in the context of war.

The results of the SWOT-analysis of the national higher education system [12] allowed to identify the strengths and weaknesses of the national higher education system, the possibilities of its further development in the face of existing threats, on the basis of which pessimistic, realistic and optimistic scenarios of higher education development in Ukraine were developed, which, according to the adopted strategy, is to achieve 5 main goals:

- 1. Efficiency of management in the higher education system. The following tasks are envisaged:
 - increase budget funding and improve the performance-based allocation formula;

- expanding budgetary lending for higher education and adult education;
- modernization of the network, consolidation of higher education institutions, support for research universities.
- 2. Trust of citizens, the state and business in the educational, scientific and innovative activities of higher education institutions. To achieve this goal, the following is envisaged:
- expanding the scope of external independent evaluation, targeted placement and competition;
 - facilitating research and consulting for business by higher education institutions;
 - creating conditions for the development of public-private partnerships in higher education;
- introduction of effective mechanisms for detecting violations of academic integrity and procedures for bringing to academic responsibility.
- 3. Ensuring quality educational and research activities, competitive higher education that is accessible to different groups of the population. To achieve the strategic goal and relevant operational objectives, the following tasks are envisaged:
- support national and international academic mobility of students, as well as referrals to foreign universities;
- providing special support to residents of the temporarily occupied territories, disadvantaged and vulnerable groups;
 - creating special conditions for applicants with outstanding achievements;
- promoting the use of innovative technologies and the latest teaching aids in the educational process, and developing research infrastructures.
 - 4. Internationalization of higher education in Ukraine. It is planned to ensure:
- harmonization of the structure of higher education in accordance with the commitments of the member states of the European Higher Education Area;
 - development of the national qualifications system;
 - simplification of procedures for the recognition of foreign educational qualifications;
- transformation of education in the security and defense sector in line with NATO doctrinal approaches and principles.
- 5. Attractiveness of higher education institutions for study and academic career. To achieve this, the following tasks are envisaged:
- Adherence to student-centered learning approaches in the organization of the educational process;
- expansion of cross-entry, joint, interdisciplinary and double programs, dual and other forms of education;
- development of general competences, legal culture, physical activity, sports and student competitions;

- development of management training programs for senior management and promising leaders of higher education institutions (personnel reserve), to

trainings to support reforms;

- conducting communication campaigns to support reforms in the higher education system, etc. [13].

For 2022-2024, an operational plan for the implementation of the Higher Education strategy in the above areas of strategic goals has been developed. [14]

The result of the full achievement of these strategic goals will be higher education, the vision of which is reflected in the strategic pyramid of the development of higher education of Ukraine for 2022-2032 [15], according to which higher education:

- competitive and socially responsible;
- has high trust in society;
- forms the professional and scientific and educational potential of the country through the implementation of quality educational programs, research and social projects;
 - integrated into the European educational and research space;
- demonstrates the dynamic development of institutions and academic communities based on the principles of academic freedom, university autonomy, integrity and inclusiveness.

Thus, the mission of higher education is to provide intellectual, cultural and professional development of the individual, to form high-quality human capital and to unite society to establish Ukraine as an equal member of the European community, to build an efficient, innovative and competitive economy and to ensure high standards of living.

The document "Strategic Pyramid of Higher Education Development in Ukraine for 2022-2032" also identifies key issues, strategic and operational goals, objectives, indicators and expected results of the higher education reform strategy.

Among the problems that need to be solved is: "imitation of student centricity in higher education institutions". The operational goal of the HEI reform is formulated as "universities for students", which implies that student-cent red learning is the basis for organizing the educational process, along with the use of innovative technologies and various forms of education. The essence of student-centered learning is that the student is an active, conscious and responsible participant in the educational process, showing more independence, initiative and responsibility for his or her learning. Student-centered learning is based on the principles of person-centered pedagogy, personal development and self-development and forms an effective system of student's life values. In student-centered learning, students' autonomy is expanded, which contributes to their self-organization, leadership potential and critical thinking. Student-centered learning contributes to the formation of an individual style of learning activity, and therefore to the development of the ability to master the main content of education in their own way. [16 - 18]

In such an educational model, the teacher becomes an advisor, consultant, moderator, tutor, facilitator and guide for the student in autonomous learning of the specialty.

The expected result of the successful implementation of student-centered learning in higher education is:

- formation of students of higher education of their own sets of competencies in accordance with the interests and needs of professional growth through the creation of an individual educational trajectory aimed at obtaining the desired result;
- awareness by higher education students of the need for continuous development and the availability of motivation, knowledge, skills and abilities to work in this direction;
- awareness by higher education students of responsibility for the learning process, understanding the value of education for further professional growth and development;
- ability to build a constructive dialogue and productive cooperation with teachers in higher education institutions and colleagues in their future professional life;
 - respect for intellectual property and strict adherence to academic integrity.

A way to implement these opportunities of student-centered learning is the participation of students in the formation and development of educational programs, choosing at their own discretion disciplines from the list of electives, which can be both related to the specialty and from other fields, performing individual tasks on topics of their choice, choosing the direction of their research at the level of coursework, qualification work, research work as part of a problem group or scientific circle.

Thus, the peculiarity of the role model of the student in student-centered education is that the student is not the one who is taught, but the one who studies at the university - a place where optimal conditions are created: for the formation and development of knowledge, abilities, skills: modern material support, scientific and pedagogical personnel, educational and scientific literature and cultural and creative component for versatile harmonious development of the personality, in addition. The focus of higher education institutions on student-centeredness creates a new paradigm of the quality of the educational process as an interaction of partners. [17]

According to A. Semenkova, "student-centered learning should cover all the main elements of the educational process, such as: interpretation and operationalization of socially significant goals; development of student-centered educational programs and curricula; compliance with language criteria; formation of new teaching tools and styles; active use of technical, Internet and telecommunication systems in education; significant improvement of professional and psychological and pedagogical competence of university teaching staff and modernization of education management". [18]

In accordance with the strategy for the development of higher education in Ukraine for 2022-2032, the basis of the educational programs "Chemistry. Informatics" study programs of the first bachelor's and second master's levels of education at KSPU were based on the concept of student centricity. According to the national qualification framework, bachelors belong to level 6 and masters

to level 7. Each level is defined by a certain set of learning outcomes that are characteristic of qualifications of the corresponding level (tab. 1) [19]

 $\label{thm:condition} \textbf{Table 1.}$ Levels of the national qualifications framework (fragment).

	Source: [19].										
level	Knowledge	Skills	Communication	Responsibility and autonomy							
6	Conceptual scientific and practical knowledge, critical understanding of theories, principles, methods and concepts in the field of professional activity and/or study	In-depth cognitive and practical skills, mastery and innovation at the level required to solve complex specialized tasks and practical problems in the field of professional activity or study	Communicating information, ideas, problems, solutions, own experience and arguments to specialists and non-specialists collecting, interpreting and applying data communicating on professional issues, including in a foreign language, orally and in writing								
7	Specialized conceptual knowledge that includes modern scientific achievements in the field of professional activity or field of knowledge and is the basis for original thinking and research, critical thinking of problems in the field and on the border of fields of knowledge	Specialized problem- solving skills required to conduct research and/or conduct innovative activities to develop new knowledge and procedures ability to integrate knowledge and solve complex problems in broad or multidisciplinary contexts ability to solve problems in new or unfamiliar environments with incomplete or limited information, taking into account aspects of social and ethical responsibility	Clear and unambiguous communication of own knowledge, conclusions and arguments to specialists and non-specialists, including students	Managing work or learning processes that are complex, unpredictable and require new strategic approaches responsibility for contributing to professional knowledge and practice and/or evaluating the performance of teams and groups ability to continue learning with a high degree of autonomy							

The study programs "Chemistry. Informatics." were developed in accordance with the requirements for the level of knowledge, skills and abilities specified for each level of education in the national qualifications framework and draft standards of higher education of Ukraine of the first (bachelor's) and second (master's) level, field of knowledge 01 Education/Pedagogy, specialty 014

Secondary Education (by subject specialties), as well as in accordance with the modern educational paradigm specified in the strategy for the development of higher education in Ukraine for 2022-2032.

The main focus of the programs is on the development of the student as a personality during the study program: the development of his or her intellectual potential, focus on his or her personal growth, and professional training in the specialty. Formation of moral and value guidelines (academic integrity, tolerance, decency, respect and support for democratic values, etc.), the importance of the concept of "lifelong learning" and, accordingly, motivation for its implementation, development of skills and abilities of self-education. In the section "Teaching and Learning" of the educational programs (EP) of both bachelor's and master's degrees, an individual approach and student-centered learning are indicated as the basis of the educational process in the EP.

The implementation of humanistic, individual, student-centered approaches in the educational process requires new forms, methods and techniques of teaching, professional training of future specialists and professionals.

The EP envisages the introduction of innovative technologies (problem-based learning, project methods), rational teaching methods, ICT technologies, distance (continuous learning) and non-formal education in the educational process of training future specialists and professionals.

The experience of using innovative technologies in the EP has shown its high efficiency and received favorable feedback from students. For example, in the course of studying General Chemistry, students are asked to solve the problem of increasing the speed of the chemical reaction of sodium thiosulfate with a solution of sulfuric acid, and they have to propose a method and experimentally test it. An example of problematic situations in the discipline of Inorganic Chemistry is the task of recognizing substances: students are given three test tubes with clear solutions unknown substances and potassium permanganate with sodium sulfite, and they are asked to find out where the alkali is, where the acid is, and where the distilled water is.

The project method is considered to be one of the most effective teaching methods, as it includes all stages of completing production tasks, from research and development work to collect information, through the selection of a method and development of a methodology for solving a problem to obtaining and presenting the results of the work. The quality of each stage depends on the level of preparation, perseverance, motivation, discipline and creativity of the student. Therefore, project-based learning is usually used no earlier than the second year of study. When studying Applied Aspects of Chemistry, students develop a recipe and make a series of cosmetic products based on it: hydrophilic oils, creams, and lotions. The masters have a similar task, but more responsible one, as they develop and produce an ointment with anti-inflammatory and nourishing properties in the disciplines of "Fundamentals of Heterocycle Chemistry" and "Fundamentals of

Pharmaceutical Chemistry".

In addition, the student-centricity of the bachelor's and master's programs "Chemistry. Informatics" programs is revealed in the "openness of education", the programs provide for the possibility of studying in full-time, distance and mixed forms at the student's choice, which significantly expands their opportunities to obtain the desired education. Distance learning has a number of advantages: the ability to adjust the time and place of study, choose your own convenient pace of work, increases individualization and adaptation of the pace and dynamics of classes to the needs and capabilities of students. Using the resources of ICT tools, it is possible to create original programs and specialization modules for students of various fields of study, regardless of the requirements for the minimum number of registered participants. Thus, distance learning is universal and highly adaptable to the learner. In the process of distance learning, students develop creativity, independence, versatility, collaboration and time management skills, which are useful traits for successful career development. Distance learning in the EP "Chemistry. Informatics" is implemented on the Moodle platform, which offers the teacher a sufficient number of tools to develop a full course in the discipline (Fig. 2).

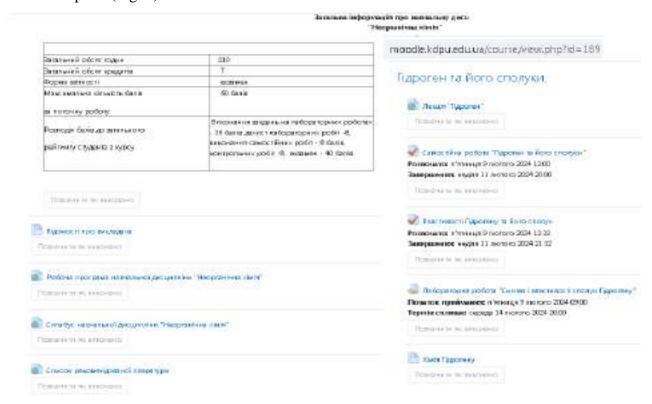


Figure 2. Filling the topic "Hydrogen and its compounds" in the course "Inorganic chemistry on moodle: the scope of the discipline, reporting form, distribution of points, information about the teacher, work programme for the discipline, syllabus for the discipline, list of references, Topic "Hydrogen and its compounds": lecture, knowledge control (tests), independent work (tests), laboratory work tasks, videos.

Source: Own study on the basis: Kryvyi Rih State Pedagogical University

Traditionally, the disadvantages of distance education are considered to be a decrease in student motivation, difficulty in developing practical skills, lack of or limited personal communication, lack of belonging to a community or significant weakening of such interactions, lack or significant weakening of teamwork skills, and inhibited development of communication skills. In accordance with modern requirements of the labor market, an applicant for a vacant position must also possess non-specialized, interprofessional skills - soft skills. They demonstrate the worker's cognitive abilities, readiness for self-organization, willingness to learn, and ability to work in a team. Therefore, the problems of distance learning that hinder the development of soft skills must be corrected: either by introducing a mixed form of education, which for the majority of students has been implemented in the "Chemistry. Informatics" educational programs for the past 4 years, or by selecting such forms of work with students that will contribute to the development of these soft skills, for example, conducting online classes using Zoom and Google meet applications, developing and conducting practical experiments, a discussion club, online defense of one's works, etc.

Among the most important skills that employers want to see in university graduates for several years in a row in The Future of Jobs Report, Analytical Thinking skills are ranked first, followed by creative thinking and three self-efficacy skills - resilience, flexibility and agility (Fig. 3) [20].

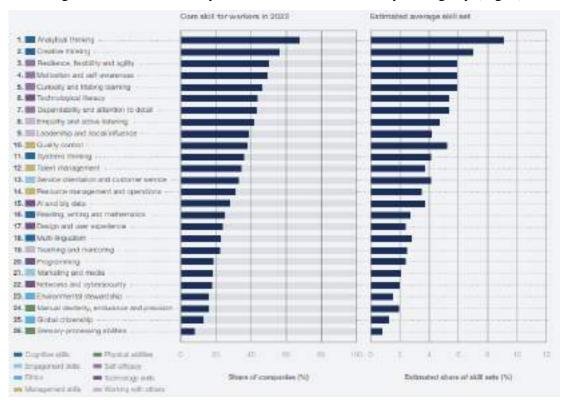


Figure 3. The core skills required by workers in 2023. Source World Economic Forum, Future of Jobs Survey 2023.

Source: [20].

The formation of most of the skills important for successful employment of students from this list is effectively carried out in the course of students' research work. The level of development of students' research competence, which includes integrally interrelated value-motivational, intellectual, creative, and communication characteristics of the individual, his or her knowledge, skills and abilities in the methodology and technology of research, demonstration and implementation of its results, will be a determining factor for the successful realization of the graduate's personality in a professional career.

Elements of research work are present in the training of bachelors, starting with the simplest search, processing and presentation of information on a particular topic (preparation of reports, abstracts), conducting mini-research in laboratory work (formulation of hypotheses, development of methods for testing them, conducting an experiment to test the hypothesis, analysis and presentation of results) to choosing a topic for a course work and conducting scientific research and designing a scientific text (term paper, article, thesis). In the preparation of a master's degree, research work occupies the highest position among other methods and forms of education. The educational components necessarily include elements of research work, and the final certification of masters involves carrying out scientific research, drafting the text of the qualification work and its open defense before the examination committee (at least 3 people). The criteria for evaluating the qualification work include: the quality of the content of the work (scientific level, originality), the student's independence in performing all stages of the research, creativity, discipline (meeting deadlines), adherence to the academic style and level of proficiency in the scientific language (terminology, nomenclature), as well as the ability to present and defend the results of their research (creative and communication skills). All these skills and abilities will be useful for a graduate in his or her position to successfully perform professional tasks, develop and grow professionally.

In order to study the level of master's research competence, according to their assessment, a survey was conducted among students still studying at the educational program "Chemistry. Informatics" of the master's level (year of entry 2023) and among graduates of this program.

The questionnaire consisted of 9 questions:

- 1. What are the components of research competence?
- 2. What types of scientific works did you implement during your studies at the educational program?
 - 3. Assess the level of formation of your special research competencies.
 - 4. Assess the level of development of your general research competencies.
 - 5. Choose those theoretical methods that you know and can use in research activities.
 - 6. Choose those empirical methods that you know and can use in research activities.
 - 7. What regulatory documents of the Kryvyi Rih State Pedagogical University about the

educational process and scientific activity do you know?

- 8. Is research competence important for successful employment and further career growth in your opinion?
- 9. In which educational components are used methods that contribute to the development of research competence?

The survey involved 7 masters: 4 - in the class of 2023, 3 - in the class of 2022 (at the time of the survey, they had already completed their studies in the educational program "Chemistry. Informatics").

In response to the first question, 100% of the surveyed students included the following components of research competence: formulation of the problem, purpose and objectives of the research; ability to think abstractly, analyze and synthesize, search, process and summarize information, and mastery of theoretical and empirical research methods. Research competence does not include: organizing and conducting research at an appropriate level - 14% of the surveyed students believe; research design and presentation – 28%; observance of academic integrity - 14%.

86% of the surveyed students completed abstract and qualification work, 57% wrote an article or presented a report at a scientific conference.

Students' self-assessment of the level of their special competences is shown in Figure 4 by criteria: 1. Ability to maintain academic integrity. 2. Ability to plan and execute a chemical experiment, observing safety rules; record, analyses and interpret its results. 3. Ability to continuous professional development, monitoring of own professional activity. 4. Ability to organize and manage students' research activities. 5. Ability to carry out own research (chemistry, methods of teaching chemistry and methods of teaching computer science). For all competencies, high and medium levels of their formation prevailed. Students were most critical of their ability to organize and carry out their own research (28%), to organize and manage students' research activities (14%), and to monitor their own professional activities (14%). (Fig.4).

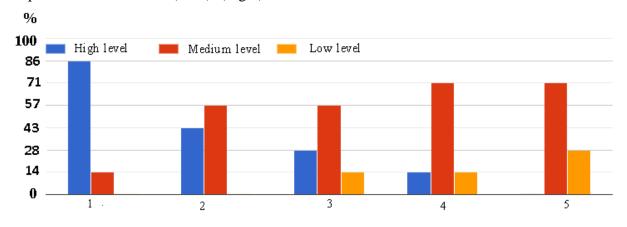


Figure 4. Levels of formation of special research competences in master's students.

Source: Own study on the basis: Kryvyi Rih State Pedagogical University

Students' self-assessment of the level of their general research competences is shown in Figure 5 by criteria: 1. Ability to generate new ideas, identify and solve problems. 2. Ability to think abstractly, analyze and synthesize, search, process and summarize information. 3. Ability to organize and conduct research at the appropriate level and present its results. All the students surveyed indicated a high and medium level of development of these competences.

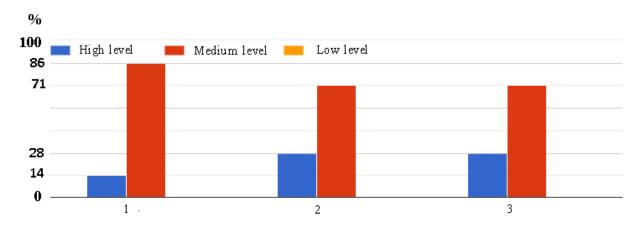


Figure 5. Levels of formation of general research competences in master's students.

Source: Own study on the basis: Kryvyi Rih State Pedagogical University

Among the theoretical research methods that 100% of the surveyed students know, they mentioned comparison, analysis, synthesis and cognition. The methods of explanation, hypotheses and classification were familiar to 85.7%. Analogy, induction abstraction methods are used by 57.1%, and only 42.9% indicated deduction in their research skills (Fig.6).

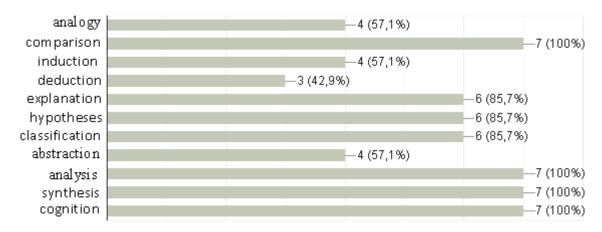


Figure 6. Theoretical research methods.

Source: Own study on the basis: Kryvyi Rih State Pedagogical University

Among the empirical research methods they know, 100% of the surveyed students mentioned observation, experiment and questionnaire survey. The methods of comparison analysis were found

to be familiar to 85.7%. The methods of measurement calculations and modelling are used by 71.4% and 57.1% respectively (Fig.7).

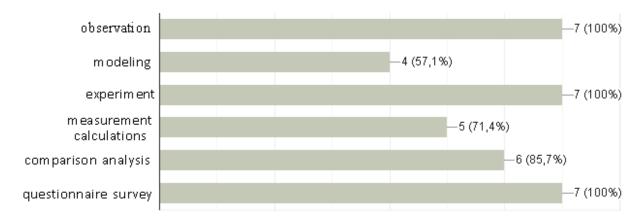


Figure 7. Empirical research methods.

Source: Own study on the basis: Kryvyi Rih State Pedagogical University

The overwhelming majority of the surveyed students highly appreciate the importance of research competence - 71.4%. 28.6% of the respondents do not distinguish it among the general set of competences formed in the educational program (Fig.8).

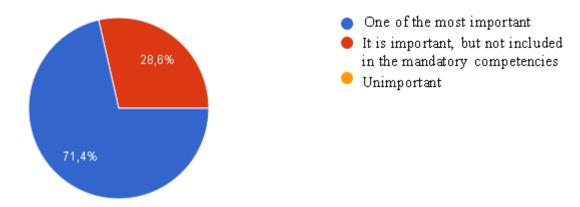


Figure 8. Assessment of the importance of pre-service training competence by masters.

Source: Own study on the basis: Kryvyi Rih State Pedagogical University

According to the respondents, the disciplines of the program in which research competence is formed and developed: "Modern educational paradigms and methodology of pedagogical research" - 100% of surveyed students, "Fundamentals of heterocycle chemistry" 85,7%, "Laboratory synthesis of compounds" - 71,4%, "Methodology of specialized teaching of chemistry in educational institutions" - 57,1%, "Innovative digital technologies in education" - 42,9%. (Fig. 9).

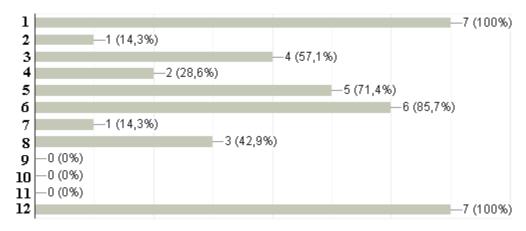


Figure 8. Formation of research competence in the disciplines of the master's educational program "Chemistry. Informatics": 1. Modern educational paradigms and methodology of pedagogical research. 2. Psychological principles of management of the educational process. 3. Methodology of specialized teaching of chemistry in educational institutions. 4. Methodology of specialized training in informatics. 5. Laboratory synthesis of compounds. 6. Introduction chemistry of heterocycles. 7. Methods of developing soft skills on chemical material. 8. Innovative digital technologies in education. 9. Web programming. 10. Databases. 11. Informatics Olympiad. 12. Qualifying work.

Source: Own study on the basis: Kryvyi Rih State Pedagogical University

Thus, the analysis of the survey results showed that master's students mostly understand the essence of research competence and evaluate it as important for successful personal and professional self-realization, and are proficient in the basic theoretical and empirical methods of research. However, the answers to the third question of the questionnaire revealed the lack of confidence of students entering in 2023 to conduct research work completely independently. Also, almost half of the educational components of the program do not use elements of research work or their insufficient amount, which does not contribute to the development of research skills of masters.

Conclusions

Higher education in Ukraine is undergoing reforms to improve the quality of education, the competitiveness of graduates and to achieve its alignment with the European Higher Education Area to create a single educational space.

The Program for the Development of Higher Education in Ukraine (the document "Strategy for the Development of Higher Education in Ukraine for 2022-2032") provides for solving management problems in the higher education system (increasing funding for education); improving the attitude of citizens, the state and business to the educational, scientific and innovative activities of higher education institutions; ensuring quality educational and scientific activities, competitive higher education that is accessible to different groups of the population; implementing measures to internationalize higher education in Ukraine and improve the attractiveness of higher education in Ukraine.

Higher education institutions in Ukraine, including Kryvyi Rih State Pedagogical University, adhere to the state strategy in their activities and development and support student centeredness as the basis of the educational process at the university. According to the Regulations of Kryvyi Rih State Pedagogical University, the educational process is based on the principles of continuity, accessibility, systematicity, scientificity, innovation, humanism, democracy, continuity, openness and transparency, national character of education, the educational process is focused on the formation of an educated, harmoniously developed, successful personality capable of continuous updating of scientific knowledge, academic and professional mobility. The training of highly qualified specialists is carried out in accordance with international and national educational standards at all educational levels. Graduates of the University are able to ensure the implementation of the state educational policy, the growth and dissemination of scientific knowledge, conduct cultural and educational activities and be competitive in the regional, national, European and global space.

Each of the educational programs "Chemistry. Informatics" of the first bachelor's degree and the second master's degree was developed as a single set of educational components (academic disciplines, individual tasks, practices, control measures, etc.) aimed at achieving the learning outcomes provided for by such a program. They were based on the ideas of student-centered learning in the organization and implementation of the educational process: harmonious personal development in both professional and socio-cultural spheres, providing students with greater autonomy, independence and freedom of choice in the educational process, emphasis on the development of soft skills - students' social and communication skills in educational program, fostering respect for intellectual property and academic integrity; students' awareness of their own responsibility for the learning process and understanding the value of education and the need for continuous development for further professional growth.

As a result of successful study in the educational programs "Chemistry. Informatics", higher education students will form their own sets of competencies in accordance with their interests and needs for professional growth through the creation of individual educational trajectories, that is, a personal path of realization of personal potential, which is formed taking into account the abilities, interests, needs, motivation, capabilities and experience of students, based on their choice of types, forms and pace of education, academic disciplines and their level of complexity, methods and means of training.

The implementation of a student-centered approach in the educational process requires innovative and interactive forms, methods and techniques of educational activity for the professional training of future specialists and professionals, such as problem-based learning, the project method, research and design work, and experiment.

The formation and development of research competence among students of higher education

is one of the main program outcomes of master's training. The survey of graduates of the educational program "Chemistry. Informatics" and students who are still studying under this program showed a sufficient level of master's research abilities and skills, as well as an understanding of the importance of this competence for their self-realization. Identified shortcomings and comments will be taken into account in the further improvement of educational programs together with the results of other surveys on the impressions and expectations of students from education. In addition, the set of competencies and program results of the educational program takes into account changes in modern science, the results of monitoring the labor market and cooperation with interested parties to prepare a future competitive specialist and professional.

REFERENCES

- 1. URL: https://www.topuniversities.com/article/tags/university-rankings
- 2. Кисельова О., Коломієць Л., Шевцов А. Якість вищої освіти: організація навчання та вимірювання знань: [монографія]. 2017. 244 с.
- 3. Moroz, V., & Moroz, S. Zmist definitsii «iakist vyshchoi osvity» v konteksti naukovykh pohliadiv predstavnykiv skhidnoievropeiskykh naukovykh shkil [The content of the definition of «quality of higher education» in the context of the scientific views of representatives of Eastern European scientific schools Teoriia i praktyka upravlinnia sotsialnymy systemamy Theory and practice of social systems management, 2. P. 59–71.
- 4. Мовчан Л. Сучасний погляд на якість вищої освіти в україні / вісник університету імені А. Нобеля. Серія «педагогіка і психологія». Педагогічні науки. 2017. № 1 (13). С. 32-37
- 5. Trebin, M. P. Osvita v umovakh hlobalizatsii [Education in the conditions of globalization]. Materialy III Mizhnarodnoi naukovoi konferentsii «Studentska molod v umovakh hlobalizatsii». 2017. P. 29–33.
- 6. Kalinicheva H. Quality of higher education as a component of human capital formation: challenges for Ukraine. Освітологія. 2021. No 10. P. 24-36.
- 7. Батечко Н., Михайліченко М. Еволюція освітніх парадигм у сучасному науковому дискурсі. Освітологія. 2020. No 9. С. 29–37. DOI: https://doi.org/10.28925/2226-3012.2020.9.4].
- 8. Stebletsky A. Factors of Education Quality Ensuring. Pedagogical Education: Theory and Practice. Psychol-ogy. Pedagogy. 2020. Vol. 33. P. 31–40.
- 9. Bilyakovska O. The quality assurance system of teacher training in the Republic of Poland and in Ukraine: comparative analysis: monograph. Lviv. 2020. 440 P.

- 10. Klimova, H. Quality assurance in higher education: european and domestic experience/ Bulletin of Yaroslav Mudryi National Law University. 2023. № 2 (57). P. 149-167.
- 11. URL: https://mon.gov.ua/storage/app/media/news/2022/04/15/VO.plan.2022-2032/Stratehiya.rozv.VO-23.02.22.pdf,
- 12. URL: https://mon.gov.ua/storage/app/media/news/2022/04/15/VO.plan.2022-2032/SWOT.stsenariyi-23.02.22.pdf
- 13. URL: https://mon.gov.ua/ua/news/opublikovano-strategiyu-rozvitku-vishoyi-osviti-v-ukrayini-na-2022-2032-roki
- 14. URL: https://mon.gov.ua/storage/app/media/news/2022/04/15/VO.plan.2022-2032/Operatsiynyy.plan.SRVO-23.02.22.pdf
- 15. URL: https://mon.gov.ua/storage/app/media/news/2022/04/15/VO.plan.2022-2032/Stratehichna.piramida-23.02.22.pdf
- 16. Шевчук Г. Sudent-centered teaching in the context of modern educational challenges. 63. V. 2. 2023. P. 27-130.
- 17. Bilyakovska Olha , Binytska Kateryna Student-centered approach as a new paradigm in of the quality of the educational process in higher education institutions. Humanitarian forum. Vol. 1. No 1, 2023. P. 10-15. https://doi.org/10.60022/1(1)-2GF
- 18. Semenkova A. Student-centered teaching in the system of improving the quality of education / Materials of the international Scientific practical conference «Contemporary research In the social sphere». 2019. P. 188–190. URL: http://dspace.opu.ua/jspui/bitstream/123456789/10541/1/%D0%A1%D0%B5%D0%BC%D0%B5%D0%BD%D0%BA%D0%BE%D0%B2%D0%B0.pdf].
- 19. Рівні національної рамки кваліфікацій. URL: https://mon.gov.ua/ua/osvita/nacionalna-ramka-kvalifikacij/rivni-nacionalnoyi-ramki-kvalifikacij
- 20. Future of Jobs Report 2023. World Economic Forum. May 2023. URL: https://www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf

METHODOLOGICAL ASPECTS OF INTRODUCING LEGO TECHNOLOGIES AS A MEANS OF DEVELOPING PRESCHOOLERS'

CONSTRUCTIVE AND MODELLING ACTIVITIES

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The problem of constructive and modelling activity of preschoolers is a leading type of children's activity that has a significant impact on the formation of mental activity practical forms. Constructive and modelling activities of preschool children are the necessary basis for the development of creative, cognitive, and sensory abilities of children more than other types of activities. Construction and modelling help preschoolers to develop their ability to self-organise, make basic decisions, take initiative, express their own judgments and trust their own and others' assessments.

The development of constructive and modelling abilities of children is a priority task of preschool education, as stated in the Law of Ukraine "On Preschool Education", the Basic Component of Preschool Education in Ukraine and in current educational programmes. It is known that design and modelling are the leading activities in preschool age. A child, like a designer, creates, learning the laws of harmony and beauty. The development of design and modelling abilities activates the preschooler's mental processes, creates interest in creative solutions to tasks, forms ingenuity, independence, initiative, and the desire to find new and original things.

The result of constructive modelling activities is the formed subject-practical and technological competence in accordance with the educational area "Child in Sensory and Cognitive Space" of the Basic Component of Preschool Education [1]. A child should have the skills of constructing from different materials, visual modelling, designing and technical creativity; be able to define a goal, predict the final result, plan a sequence of actions, and coordinate their own actions with those of partners.

One of the most effective methods of developing a child in the sensory and cognitive space is the use of various construction sets, which is in line with the Memorandum of Understanding between the Ministry of Education and Science of Ukraine and The LEGO Foundation (Denmark) and the Promoting Education project. LEGO Education is the most widely used construction set in the preschool education system. The introduction of LEGO in the educational process of preschool educational institutions contributes to the formation of key skills of preschoolers; development of the

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ability to work independently and in a team, the desire for self-education; development of children's communication and speech.

The issues of introduction and use of LEGO constructors in the educational process were studied by N. Bibik, Y. Demchenko, A. Yevsiukova, T. Mukii, I. Palazova, T. Pecker, O. Petegirich, A. Kostetska, T. Forostiuk; the use of LEGO in the constructive activity of preschoolers was defined by T. Hurkovska, T. Kuzmina, O. Roma, S. Smoliana, I. Suhenko, etc.

The LEGO educational environment has a well-grounded concept, including a well-thoughtout system of tasks that allow working both independently and in a team.

Children's constructing and modelling is implemented in activities in which they build, mould, assemble, integrate, and create new samples (models) [2]. These can be products made of paper, plasticine, toys, wood, cardboard, clay, mastic, plastic, etc.

LEGO constructors stimulate the practical and intellectual development of children, do not limit the freedom of experimentation, develop imagination and communication skills, help to live in a fantasy world, and develop the ability to interpret and express themselves.

The purpose of the study is to substantiate the effectiveness of the organising work system on the development of constructive and modelling activities of preschool children by working with LEGO.

The subject of the study is LEGO as a means of developing constructive and modelling activities of preschool children.

Research methods are analysis and synthesis of scientific, educational and methodological literature, which made it possible to compare different views on the problem under study, to determine the criteria and indicators of the development of constructive and modelling activity of preschool children; the method of generalisation the best pedagogical practices contributed to the substantiation of the effectiveness of the work system on the development of constructive and modelling activity of preschool children by working with LEGO in the pedagogical process of preschool educational institutions.

Let us consider the features of the programme implementation for the development of constructive and modelling activities using LEGO technologies. The novelty of the programme is that it allows preschoolers to discover the practical expediency of LEGO construction in the form of cognitive activity, to develop the skills and abilities necessary for later life.

The programme is aimed not so much at teaching children complex ways of attaching parts as at creating conditions for personal expression. LEGO construction opens up a new world for children, enables them to acquire such social qualities as curiosity, activity, independence, responsibility, mutual understanding, skills of productive cooperation, increase self-esteem through the realisation that they can do it, set them in a positive mood, relieve emotional and muscle tension, etc. They

develop the ability to use instructions and drawings, diagrams, and form logical and project-based thinking. Preschoolers go through 4 stages of mastering this programme: 1 – perception; 2 – thinking; 3 – action; 4 – result (product). At the end of each lesson, children see the result of their work.

In the course of educational activities, children become builders, architects and creators, and while playing, they invent and implement their ideas.

The goal of the programme is to create favorable conditions for the development of basic design skills in senior preschool children based on LEGO construction.

The objectives: LEGO construction classes have a number of educational, developmental and upbringing tasks:

- to develop preschoolers' interest in modelling and construction, to stimulate children's technical creativity;
 - to teach to construct and model according to: a model, drawing, a given scheme, an idea;
- to form the prerequisites of learning activities: the ability and desire to work, to perform tasks in accordance with the instructions and the goal, to complete the work started, to plan future work;
 - to improve children's communication skills when working in pairs and teams;
 - to identify gifted, talented children who have non-standard creative thinking;
- to develop fine motor skills, stimulating the general language development and mental abilities of senior preschool children in the future.

The programme expected results:

- there will be interest in independent construction, the ability to apply the acquired knowledge in the design and assembly of various buildings, cognitive activity, imagination, fantasy and creative initiative;
- design skills and abilities, the ability to analyse an object, identify its characteristic
 features, main parts, and establish a connection between their purpose and structure develop;
- children's communication skills when working in pairs, groups, teams, and the distribution of responsibilities improve;
- the prerequisites for learning activities are formed: the ability and desire to work, to perform tasks in accordance with the instructions and the goal, to complete the work started, to plan future work.

Children will have an idea of:

- LEGO parts and how to connect them;
- the stability of models depending on their shape and weight distribution;
- the dependence of the structure strength on the way its individual elements are connected;

- the relationship between the shape of a structure and its functions.

The classes under the programme are structured in such a way as to create favorable conditions for the development of students design and modelling abilities. The main didactic principles of the programme are: accessibility and visibility, consistency and systematicity of learning. While studying under the programme, children go from simple to complex, returning to the material they have learned at a new, more complex creative level.

Basic principles of LEGO construction are:

- taking into account the individual capabilities of children in the development of constructive and modelling skills;
- activity and creativity the use of effective methods and purposeful activities aimed at developing children's creative abilities;
- complexity of problem solving solving constructive problems in various types of activities: design, play, cognitive;
- effectiveness and guarantees realisation of children's rights to receive assistance and support, guarantees of positive results regardless of age and level of development of children.

The forms of learning, recommended by researchers Z. Lishtvan, V. Nechaeva, L. Paramonova, are used to develop children's constructing and modelling as an activity in which a child develops. They are design by sample, design by model, design by conditions, design by simple drawings and visual diagrams, design by plan.

Children will learn: to distinguish and name the parts of the constructor; to construct according to the conditions set by teachers; to construct according to a model, drawing, a given scheme; to perform tasks independently and creatively, to implement their own ideas; to work in pairs, groups and teams; to talk about the created structures and models.

Children will develop moral and volitional qualities: tolerance, diligence, attentiveness, ability to work in a team, ingenuity, creativity; cognitive qualities: observation, curiosity, interest, research activity; qualities of independent agreement with each other; design skills and abilities.

According to the types of constructive modelling activities, there are five main methods of teaching with LEGO:

1. **Designing by the example**. This is a demonstration of LEGO construction and modelling techniques. The teacher suggests first looking at the construction, highlighting the main parts. Then, together with the child, select the necessary parts of the construction set by size, shape, color, and only then assemble all the parts together. All actions are accompanied by explanations and comments from an adult. The teacher explains how to connect the individual parts of the construction. In the

method of "Model building", communication skills are developed, namely: the ability to conduct a dialogue, negotiate with each other, and find the best solution.

- 2. **Designing by the model**. The model has many elements that may be hidden. The child must determine independently what parts make up the structure. As a model, you can offer a figure (construction) made of cardboard or present it in a picture or on an interactive whiteboard in the form of a silhouette. The child looks at the picture, highlights the hidden elements and starts assembling the structure. Analytical and imaginative thinking is activated when constructing from a model.
- 3. Constructing according to the given conditions. The child is offered a set of conditions that he or she must fulfil without being shown how to work. That is, the teacher does not give the methods of construction, but only talks about the practical application of the robot. Children continue to learn how to analyse samples of finished products, identify their essential features, group them by the similarity of their main features, and understand that differences in shape and size depend on the purpose (given conditions) of the design. The teacher makes a riddle about the object, and after guessing it, the child draws it. Then he or she identifies the main features of the object and chooses which parts to use to build the structure. This technique helps to develop the preschooler's creative abilities. When mastering all of the above teaching methods by working with LEGO, the work in the constructive modelling becomes more complex.
- 4. *Designing from the simplest drawings and visual diagrams*. At the initial stage of construction, the diagrams should be quite simple and detailed in drawings. With the help of diagrams, preschoolers develop the ability to both build and choose the correct sequence of actions. Later, the child can not only build according to the diagram, but also vice versa draw a diagram based on a visual construction (represented by a toy). Or determine the sequence of construction on their own. That is, preschoolers learn to independently determine the stages of the future construction and analyse it.
- 5. Designing by plan. Having mastered the previous LEGO construction techniques, they can construct according to their own ideas. Now they determine the theme of the construction, the requirements it must meet, and find ways to create it. In design-based construction, the knowledge and skills acquired earlier are used creatively. It develops not only children's thinking, but also their cognitive independence and creative activity. Children freely experiment with building materials. The constructions become more diverse and dynamic. In case of difficulties, the child can ask the teacher for help. Thus, children consistently develop their design and modelling skills, logical thinking, and the ability to use diagrams, instructions, and drawings step by step, in the form of various game and experimental activities.

Some certain activities are planned at the initial stage of work with LEGO constructors in the preschool education institution:

- exhibitions of children's works, both independent and joint with parents and teachers;
- competitions between groups for the best thematic building, for the best developing subject-spatial environment in the group in the area of LEGO construction;
 - projects within the group or educational institution;
 - photo reports, consultations on the website of the institution.

Purposeful and systematic work in PEI on the development of constructive and modelling activities of preschoolers by working with LEGO will allow to develop technical skills and abilities of children; promote aesthetic attitude of preschoolers to the world around them; to implement children's independent creative activity [3].

Children will develop fine motor skills, searching creative activity, aesthetic taste, etc.

Prospective plan of joint educational activities (senior preschool age 5-7 years).

First half of the year:

- To consolidate the skills acquired in the middle group.
- To develop observation skills, clarify ideas about the shape of objects and their parts, their spatial location, relative sizes, differences and similarities.
- To develop imagination, independence, ingenuity, ability to work in a concentrated manner.
- To teach to build beautiful buildings based on impressions from drawings, photographs,
 and drawings.
 - To continue introducing new details.
 - To encourage thinking out loud when solving a construction and modelling problem.
- To teach thinking in advance about the idea of a future building, to present its joint constructive solution, to correlate their idea with the available building material.

Second half of the year:

- To teach working with small details.
- To create more complex buildings.
- To work together without interfering with each other to create collective buildings.
- To teach talking about the construction of other pupils.
- To share responsibilities independently.
- To teach helping friends in difficult times.
- To build a structure according to drawings without relying on a model.
- To develop the ability to transform a structure or model according to the given conditions.
- To direct children's imagination to create new original designs and models.
- To develop creative activity.

- Interpersonal communication skills and collective creativity.
- Ability to analyse and plan activities.
- Interest in LEGO construction.

An approximate distribution of classes per year is designing according to the model and transforming the model according to the conditions (26 hours); designing according to the conditions (4 hours); designing according to the idea (8 hours).

Classes were held once a week for 25 minutes in groups of 8-10 senior preschool children.

At the first lessons, children consolidate the knowledge and skills acquired in the middle group.

For this purpose, the whole month (September) should be spent on similar lessons of the previous year, but in a more complicated version. The main forms of classes are: modelling according to a scheme, plan, or model; work on projects [4].

The project gives children the opportunity to experiment, create their own world, increase self-esteem and learn to work in a team. Children gain experience in communicating with each other and learn to respect the opinions and work of others. Work on the project begins with the choice of a topic and includes the following stages:

- Preparatory: looking at illustrations, photos, discussing the project topic.
- The main stage, which is divided into two parts: reviewing samples, diagrams, creating a project in several classes.
- Final: a conclusion about the work done. Children present their project, original ideas,
 imagination, diligence, and interest are noted.

The methods and techniques of constructive modelling activities with LEGO are presented in Table 1.

Table 1. The methods and techniques of constructive modelling activities with LEGO

Methods	Techniques		
	Examination of finished structures, demonstration of fastening		
Visual	methods, methods of selecting parts by size, shape, color, ways of		
	holding them in the hand or on the table.		
	Inspection of LEGO parts, involving the connection of various analysers		
Information and perceptual	Examination of finished structures, demonstration of fastening methods, methods of selecting parts by size, shape, color, ways of holding them in the hand or on the table. Inspection of LEGO parts, involving the connection of various analysers (visual and tactile) to get acquainted with the shape, determine the spatial relationships between them (on, under, left, right). joint activity of the teacher and the child. Reproduction of knowledge and methods of activity (form: assembling models and structures according to a model, conversation, analogue exercises) Children's use of the knowledge and techniques they have seen in		
information and perceptual	spatial relationships between them (on, under, left, right). joint activity		
	of the teacher and the child.		
	Reproduction of knowledge and methods of activity (form: assembling		
Reproductive	models and structures according to a model, conversation, analogue		
	exercises)		
Practical	Children's use of the knowledge and techniques they have seen in		
Fidelical	practice.		

Verbal	Brief description and explanation of actions, accompaniment and demonstration of samples, different variants of models.					
Problem solving	Setting a problem and searching for a solution, creative use of readymade tasks (objects), independent transformation of them.					
Gaming	Using the plot of games to organise children's activities, characters to play out the plot.					
Partial search	Solving problematic tasks with the help of a teacher.					

Children not only describe their structures and talk about their purpose, but also answer questions in the course of constructive modelling activities, not only to the teacher's questions, but also to those of other children in the process of construction activities. This develops communication skills, as in the process of working together, children can ask what others are doing and how they are doing it, get or give advice on how to fasten or combine their structures for a larger one.

Construction classes have their own logical structure:

Organisational stage – motivation for constructive modelling activities in a playful way (up to 5 minutes). It is important to conduct the organisational part of the lesson in an unusual, interesting, exciting and creative way. A bright, intriguing beginning will help to form a positive attitude to the lesson, create a favorable emotional mood, and promote the desire to experiment and create. The teacher usually uses large and varied motivating material in combination with pedagogical techniques in the introductory part of the lesson in order to activate the cognitive interest, search activity and attention of preschoolers:

- a moment of surprise holding a dialogue with children of a toy character, a favorite fairy-tale hero, who will ask for help, invite children on an exciting journey to a fairy-tale country;
 - a video message from a fairy tale or fictional character;
 - poems and riddles;
 - reading a fragment of fiction;
 - didactic and outdoor games;
 - informative conversation and discussion of issues;
 - a problem situation;
 - musical accompaniment;
 - viewing illustrations;
 - demonstration of presentations;
 - demonstration of videos or animated films.

The main stage is the most active practical part of the lesson (from 10 minutes in the junior group to 20 minutes in the preparatory group), which includes the following activities: showing a sample, explanation of step-by-step instructions by a teacher, analysis of a diagram, card, drawing;

independent work of children according to a sample, diagram or creative idea, physical activity, video exercises with LEGO men, outdoor games, finger or breathing exercises that will help them relax and then return to exciting construction with new energy.

Preschoolers can work individually, in pairs or as part of a small subgroup. The teacher should understand that children need to practice so that they can confidently assemble the model in pairs.

After completing each individual stage of work, the teacher together with the children checks the correctness of the parts connection, comparing with the sample or diagram. More attention should be paid to designing according to "technical tasks", which are aimed at developing technical thinking. It is necessary to prepare materials for each child to implement the technical task: measurements (strips of cardboard of a certain length, width), rulers, models of situations (river, building, etc.).

The final stage (up to 5 minutes) is a reflection, cleaning up the workplace, and organising an exhibition of children's work. Each child participating in the work on the proposed task reveals his or her attitude to the work done, tells about the progress of the task and the purpose of the construction. A detailed analysis is carried out taking into account the following criteria: accuracy, symmetry, integrity, stability and attractive appearance of the structure; technical skills; the degree of independence of the work performed; dedication, discipline, hard work, a sense of friendly and emotional responsiveness shown during the work on the project.

The proposed system of didactic games aimed at forming preschool children's understanding of the external properties of objects is classified by educational areas:

- the educational direction "Child's Personality", which includes such games as: "Pass the brick", "Who is faster", etc.
- the educational area "Child in Sensory and Cognitive Space", which includes such didactic games as: "Find a brick like mine", "Find the extra part", etc.
- the educational area "Child in the Natural Environment" included the following games:
 "Traffic lights", "Animal world", etc.
- the educational area "Melon's Speech", for example, such games as "Building a Sound Pyramid", "Letter in the Window", "LEGO Alphabet", etc;
- the educational programme "A Child in the World of Art": "Build a long path", "Wide and narrow path", etc.

Senior preschool children are more independent in games and can take on the role of a leader. The games develop collectivism, memory, and thinking.

The game "Mystery bag". The purpose is to teach children to guess the details of the construction set by touch. The equipment is LEGO construction set, bag. The course of the game: The

presenter holds a bag with LEGO parts. Children take one part in turn and recognise it by touch. Then they take it out of the bag, show it to everyone and describe it.

The game "Name and build". The goal is to teach teamwork. To consolidate the names of the LEGO parts. The equipment is LEGO DUPLO construction set. How to play. The leader gives each child a piece of the construction set in turn. The child names it and keeps it. When each child has three parts, the leader gives the task to come up with, build from all the parts and present one building.

The game "Build without opening your eyes". The goal is to teach to build with eyes closed. To develop fine motor skills, endurance. The equipment is LEGO construction set. The course of the game. There is a construction set in front of children. Kids close their eyes and try to build something. The winner is the one whose construction is more interesting and original.

The game "LEGO gifts". The purpose is to develop interest in the game, attention, memory. The equipment: playing field, men for the number of players, a dice – one side with the number one, the second with the number two, the third with the number three, the fourth cross – skip the move, LEGO gifts. The course of the game. Children distribute the men among themselves. Put them on the playing field. They take turns rolling the dice and moving clockwise. When the first man goes around the whole circle, he wins and the child chooses a gift. The game continues until all the gifts are disassembled.

Thus, constructive and modelling activity by working with LEGO is a type of productive activity based on creative modelling using a wide range of universal LEGO elements. The use of LEGO constructors helps to implement the task of developing the preschooler's personality, as in the process of an exciting creative and cognitive game, favorable conditions are created that stimulate and engage the preschooler in useful constructive and modelling activities.

Playing with LEGO for children is a means of exploration and orientation in the real world. LEGO technologies contribute to the formation of positive motivation for constructive and modelling activities, active involvement of the preschooler in the game process, education of moral skills, respect for others, and create a basis for the formation of group work skills.

REFERENCES

1. Basic component of preschool education of Ukraine (new edition). URL: https://mon.gov.ua/ua/npa/pro-zatverdzhennya-bazovogo-komponenta-doshkilnoyi-osviti-derzhavnogo-standartu-doshkilnoyi-osviti-nova-redakciya (accessed 25.05.2024).

- 2. The use of LEGO in working with preschool children: a methodological guide for students majoring in 'Preschool Education' and teachers of preschool education / compiled by T.M. Bogdan, D.O. Galagan, D.M. Yaroshenko. Chernihiv: Balykina O.V., 2018. 60 p.
- 3. Development of creative abilities of children of senior preschool age by means of LEGO construction. Innovative pedagogy: a collection of scientific works. Odesa: Black Sea Research Institute of Economics and Innovation, 2019. Issue 12. T.2. P.106-109.
- 4. Roma O. Playing in a new way, learning in a different way: a methodological guide. Kyiv: The LEGO Foundation, 2018. 44 p.

PECULIARITIES OF MANIFESTATIONS OF TRUST IN STUDENTS OF YOUTH AGE

ОСОБЛИВОСТІ ПРОЯВІВ ДОВІРИ У СТУДЕНТІВ ЮНАЦЬКОГО ВІКУ

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Summary

The article analysed the specifics of the trust of respondents of young age. Special attention is paid to analysing an empirical study of trust in significant spheres of life among students. The primary method used in the empirical research was T. Skripkina's Self-trust and Trust in Others questionnaire.

It turned out that more than half of the surveyed students trust themselves, and almost half trust others at an average level, which allowed us to state the prevalence of self-trust compared to trust in others. It should be noted that a low level of trust in oneself was not observed, in contrast to trust in others. Students trust others the most in the educational and family spheres, the least in the sphere of social contacts and intimate sphere. The highest indicators of self-trust among the interviewed respondents of youth age are in the social and family spheres, and the lowest are in the educational and intimate spheres.

It should also be noted that female students trust others much more, and male students trust themselves more. The revealed trends indicate the need to increase trust components, mainly in the intimate and educational spheres.

Keywords: trust, students, youth, trust in others, self-trust, significant spheres of life.

Introduction

The current situation in which Ukraine is right now, connected with the warn and the growing crisis instability in all spheres of life, actualises more than ever the strengthening of the qualities in young people necessary for the development of the strength of their "I", personal flexibility, responsibility, life stability, the ability to effectively interact with other. An essential condition for the effectiveness of a person's functioning in challenging conditions is the optimal development of trust because, like any other reflexive phenomenon of self-awareness, it ensures both the integrity of personality and is a condition for his effective interaction with the outside world: thanks to it, the comparison of cognitive and emotional components of own instructions to actual personal behaviour.

Since the destructiveness of trust negatively affects the ability to manage one's own life and becomes the cause of life failures, its research is especially relevant to young people.

The youth period is essential for constructing and implementing life plans, the first fundamental steps in building one's own future [5]. Harmonisation of life instructions and their integration into certain stable constructs with a positive modality are the tasks of this age, which the youth successfully coped with. A young person's choice of friends, life partner, professional choice, and career orientation is undoubtedly influenced by his trusting attitude towards him/herself, which can be both constructive and destructive.

Trust in other people and the world is the second important component of trust; the youth age is also sensitive to its formation. As noted by O. Brukhovetska [2], plunging into oneself and one's own experiences causes a young person to feel a wide range of different emotions that cause not only awareness of his own value and uniqueness but also a feeling of loneliness in this world. This creates an acute need to find yourself through communication and optimal trusting relationships with other close people.

O. Biletska [1], L. Kolomiyets, H. Shulga [3], M. Nakonechna [4], G. Chaika [7] and others, characterising communication in youth, emphasise that it is built based on a contradictory interweaving of two needs: in isolation (privatisation) and in affiliation. Isolation in youth manifests itself in emancipation from the control of elders, but it is also inherent in relationships with peers. A behavioural manifestation of the need for isolation in youth is seclusion and loneliness. Young men and women have an increasing need not only for social but also for spatial and territorial autonomy, as well as the inviolability of their personal space.

The satisfaction of the need for affiliation is manifested in young people's friendships. Acceptance of oneself and one's communication partner is possible only in friendly relationships with high levels of trust (mutual optimal self-disclosure of various secrets, hidden facts, intimate experiences, and dreams). Due to looseness, reduction of excessive behavioural control, and removal of external social masks, the fear of social evaluation and condemnation disappears, and the opportunity to be yourself, to trust yourself, others, and the world appears.

T. Kuprii [4], characterising communication at a young age, emphasises that the maximum manifestation of affiliation occurs with a combination of physical ability (there is a real partner), the motive to trust the partner during communication, developed communication skills and formed competences (there is not only experience and knowledge, how to do it, but there are effective models imprinted in the mind of how to do it).

So, among youth, there is a paradoxical personal contradiction, which looks like the simultaneous existence of two opposite needs: affiliation and detachment, which, respectively, are related to trust-distrust. Interacting with the world, each individual is simultaneously directed at

oneself and the world. It is precisely because of such dual simultaneous orientation of the human psyche that the existence of "duality" of trust (to the world and oneself) is possible. The ratio of trust components is dynamic, constantly strives for balance, and is often violated due to the action of the psyche's protective mechanisms.

T. Skripkina [6], the founder of the study of trust as a socio-psychological phenomenon in post-Soviet psychology, noted that equilibrium is possible only through changing both poles of trust, which inevitably leads to deformations. The ability to effectively reconcile distortions of trust characterises a mature personality.

Trust deformations in relationships can manifest in different ways. The first option consists of the predominance of trust in oneself over trust in others and the world. This option is hazardous for the individual because excessive self-confidence and reluctance to give in leads to the formation of a dominant or aloof position about others, which pushes other people away from interaction with such individuals and ultimately leads to the deterioration of relations with others, loneliness, narrowing of the circle of trusted communication. The second option - the absolutisation of trust in others - leads to an orientation towards others and self-denial not only in behaviour but also in the refusal to trust one's feelings and thoughts. This variant of the deformation of trust behaviour is manifested in the neurotization of the personality itself due to the frustration of self-esteem, the level of harassment, and increased personal anxiety due to the constant desire to meet the expectations of others in everything. Another level of manifestation of trust deformations is if, after an unsuccessful interpersonal interaction, the individual has a decrease in both self-trust and trust in others, which is manifested in the simultaneous desire to be apart from other people, to treat them as objects, and not to delve into their own experiences to avoid traumatic experiences. Such alienation manifests itself as a crisis of confidence.

Therefore, the most relevant in youth is the contradictory interweaving of the need for affiliation and separation, expressed in trustful or distrustful relationships. Two tendencies of the motive of affiliation are distinguished: waiting with hope for affiliation, which leads to a balance of trusting behaviour concerning oneself and trusting others, and staying with fear of rejection. This often leads to changes in trust behaviour, reducing its balance, and is expressed in various deformations of trust, particularly deprivation, deficit or – crisis of trust.

Thus, the theoretical analysis allows us to present trust as a complex psychological phenomenon with two important interrelated components: trust in oneself and others. In youth, the manifestations of this phenomenon are exacerbated since it is precisely at this age that there is a paradoxical personal contradiction manifested in the simultaneous existence of two opposite needs: affiliation and exclusion. The ability to coordinate them in a balanced way affects the dynamic

balance of trust-distrust of an individual towards others and oneself. We took these into account when planning and conducting an experimental study.

Purpose, subject and research methods

Purpose: to empirically research the manifestations of self-trust and trust in others' components among student youth.

The research on the characteristics of self-trust and trust in others manifestations among students was carried out according to the T. Skripkina Self-Trust and Trust in Others questionnaire. The research was conducted at the Sumy State Pedagogical University, named after A.S. Makarenko. The sample of the respondents under study consisted of 60 people. The respondents were the second and third year students aged 18-20, 34 female and 26 male students.

Research results. Quantitative indicators according to the T. Skripkina Self-Trust and Trust in Others questionnaire are presented in tables 1, 2, 3 and figures 1 - 6. It turned out that most respondents (55%) trust themselves, and 45% trust others at an average level. At a high level, 45% of respondents trust themselves and 40% in others. At a low level, 15% trust others, and 0% trust themselves. Thus, among the surveyed students, self-trust prevails over trust in others, and it should also be noted that a low level of self-trust is not observed, unlike trust in others, which occurs among the researched.

The method also revealed levels of trust in certain spheres of life, among which the highest indicator is in the educational sphere, namely - 71% of respondents trust others at an average level, at a high level - 15% and at a low level - 14%. In the family sphere, 47% trust others at a high level, 41% - at an average level, and 12% - have a low level of trust. In the intimate sphere, 45% trust others at an average level, 33% at a high level, and 22% at a low level. In the social sphere, 45% of respondents have average trust in others, 38% - high, and 21% - low.

As for self-trust, the highest indicator is also in the educational sphere: 58% of the respondents trust themselves at an average level, 28% - at a high level, and 14% - at a low level of trust. In the social sphere, the highest indicator is 56% of respondents who trust at an average level, 35% at a high level, and only 9% at a low level. In the family sphere, 50% trust themselves at a high level and 50% at an average level. The study's results established that in the intimate sphere, 47% of respondents trust themselves at a high level, 45% - at an average level, and 8% - at a low level.

Table 1. Peculiarities of students' trust in others and self-trust according to the method of T. Skripkina Self-Trust and Trust in Others (in %)

Source: original research conducted at Sumy State Pedagogical University named after A.S. Makarenko

		Trust in others					Self-trust					
	Levels of trust	Family sphere	Intimate sphere	Educational sphere	Social sphere	Total level	Family sphere	Intimate sphere	Educational sphere	Social sphere	Total level	
Quantity	High	28	20	9	23	24	30	28	17	21	27	
of person	Average	25	27	43	25	27	30	27	35	34	33	
	Low	7	13	8	12	7	0	5	8	5	0	
In	High	47%	33%	15%	38%	40%	50%	47%	28%	35%	45%	
percenta-	Average	41%	45%	71%	41%	45%	50%	45%	58%	56%	55%	
ges (%)	Low	12%	22%	14%	21%	15%	0%	8%	14%	9%	0%	

Diagrams (Figs. 1 and 2) can be graphic versions of quantitative indicators of students' self-trust and trust in others. They allow us to observe the difference in levels of trust in life spheres.

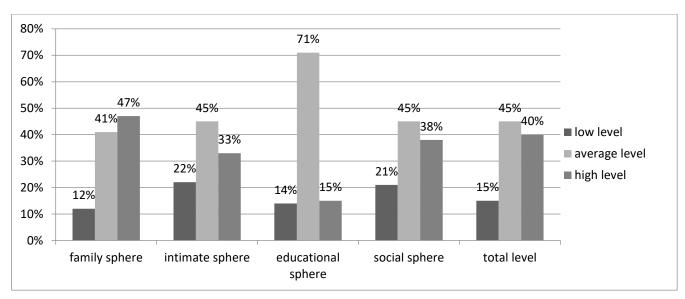


Fig. 1. Quantitative indicators of students' levels of trust in others according to the method of T. Skripkina Self-Trust and Trust in Others (in %)

Source: original research conducted at Sumy State Pedagogical University named after A.S. Makarenko

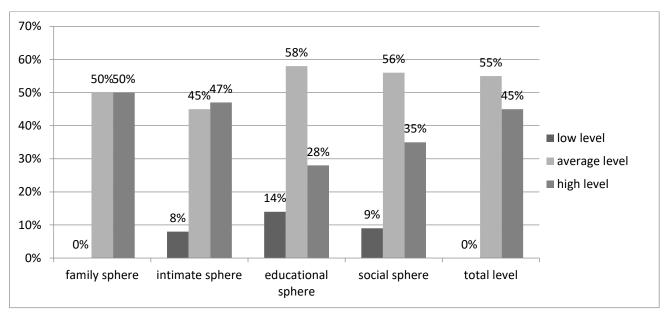


Fig. 2. Quantitative indicators of students' levels of self-trust according to the method of T. Skripkina Self-Trust and Trust in Others (in %)

We will analyse the results of the research among male and female students separately. Thus, it was found that among females, the general level of trust in others is 55% at a high level, 29% at an average level and 16% at a low level. Among male students, 19% of respondents trust others at a high level, 66% at an average level, and 15% at a low level. From such data, it can be seen that trust in others is significantly higher among female than male students.

In the family sphere, 50% of female students trust others at a high level, 35% at an average level, and 15% at a low level, while among male students in this life area, 50% trust others at an average level, 43% at a high level, and 7% at a low level. In the intimate sphere, 44% of female students trust others at a high level, 29% at an average level and 27% at a low level, and 66% of male students interviewed trust at an average level and 19% at a high level, 15% at a low level. In the educational sphere, 73% of the surveyed female students have an average level of trust in others, and only 12% have a high level of trust, 15% have a low level of trust; among male students, 69% trust in others at an average level, 19% at a high level, and 12% at a low level. In the social sphere, 55% of the surveyed female students trust others at a high level, 23% at an average level, and 22% at a low level; among male students in this area, 66% trust others at an average level, 19% at a low level, and 15% at a high level.

Table 2 and Figures 3 and 4 present the results of the study on gender specifics in the manifestation of students' trust in others.

Table 2. Gender specifics of the manifestation of students' trust in others according to the method of T. Skripkina Self-Trust and Trust in Others.

A.S. Makarenko

			Female students					Male students					
	Levels of trust in others	Family sphere	Intimate sphere	Educational sphere	Social sphere	Total level	Family sphere	Intimate sphere	Educational sphere	Social sphere	Total level		
Quantity	High	17	15	4	19	19	11	5	5	4	5		
of person	Average	12	10	25	8	10	13	17	18	17	17		
	Low	5	9	5	7	3	2	4	3	5	4		
In	High	50%	44%	12%	55%	55%	43%	19%	19%	15%	19%		
percenta-	Average	35%	29%	73%	23%	29%	50%	66%	69%	66%	66%		
ges (%)	Low	15%	27%	15%	22%	16%	7%	15%	12%	19%	15%		

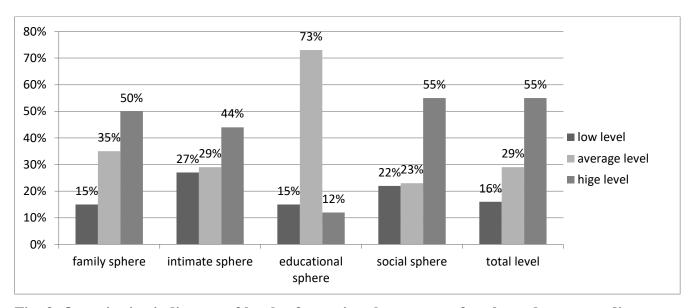


Fig. 3. Quantitative indicators of levels of trust in others among female students according to the method of T. Skripkina Self-Trust and Trust in Others

Source: original research conducted at Sumy State Pedagogical University named after A.S. Makarenko

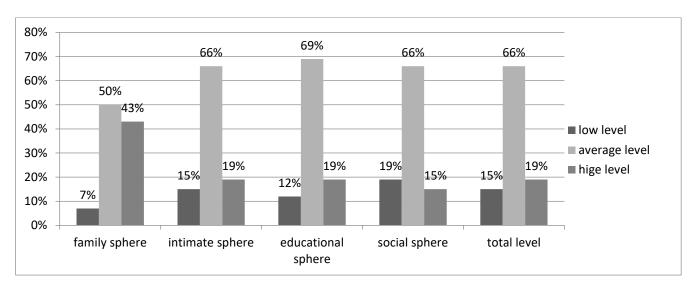


Fig. 4. Quantitative indicators of levels of trust in others among male students according to the method of T. Skripkina Self-Trust and Trust in Others

Also, our study showed that female students' total level of self-trust was distributed as follows: high level - 27%, average - 73%, low - 0%. And among male students, the level of self-trust is somewhat different: 59% - high level, 41% - average, 0% - low. Thus, the results show that male students' self-trust is higher than female.

In the educational sphere, the highest rate is taken by 77% of the surveyed female students, who have an average level of self-trust, 16% - low level, and only 7% - high level; among male students, 44% have a high level of self-trust, 44% have an average level, and 12% have a low level. In the social sphere, 73% of female students self-trust at an average level, 23% at a high level and 4% at a low level, and among male students, 44% at a high level and 44% at an average level, 12% at a high level. In the intimate sphere, 66% of female students self-trust at an average level, 30% at a high level and 4% at a low level; among male students, 59% have a high level of self-trust in this area, 29% - average, and 12% - low. In the family sphere, 62% of the surveyed female students have an average level of self-trust, and 38% have a high level; there was no low level of manifestation among female students in this sphere. Among male students, 59% of respondents have a high level of self-trust and 41% - at an average level; a low level of self-confidence in this area of life was not found among male respondents.

The study results on gender specifics in the manifestation of students' self-trust are presented in Table 3 and Figures 5 and 6.

Table 3 Gender specifics of the manifestation of students' self-trust according to the method of T. Skripkina Self-Trust and Trust in Others

		Female students					Male students					
	Levels of self-trust	Family sphere	Intimate sphere	Educational spher	Social sphere	Total level	Family sphere	Intimate sphere	Educational spher	Social sphere	Total level	
	High	10	8	2	6	7	20	20	15	15	20	
Quantity	Average	16	17	20	19	19	14	10	15	15	14	
of person	Lowe	0	1	4	1	0	0	4	4	4	0	
In	High	38%	30%	7%	23%	27%	59%	59%	44%	44%	59%	
percenta-	Average	62%	66%	77%	73%	73%	41%	29%	44%	44%	41%	
ges (%)	Lowe	0%	4%	16%	4%	0%	0%	12%	12%	12%	0%	

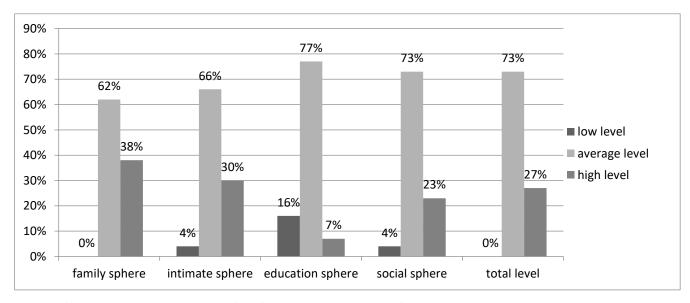


Fig. 5. Quantitative indicators of self-trust levels among female students

Source: original research conducted at Sumy State Pedagogical University named after A.S. Makarenko

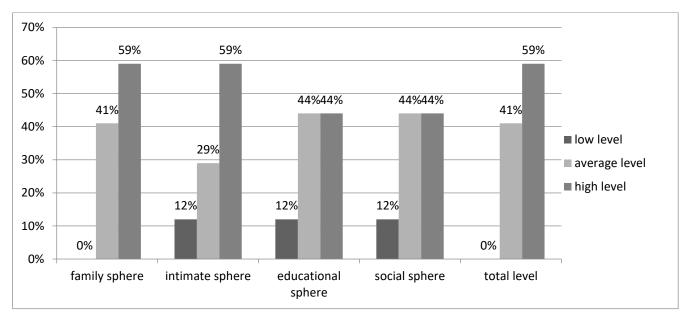


Fig. 6. Quantitative indicators of self-trust levels among male students

Conclusions

- 1. The results of our research indicate that self-trust prevails over trust in others among student youth.
- 2. Unlike trust in others, a low level of self-trust was not found among student youth.
- 3. In both groups of respondents, the lowest indicators of a high level of trust compared to other spheres were found in the intimate sphere (relationships with a boyfriend or girlfriend) and in the sphere of education.
- 4. Trust in others among female students is higher than in male students in all significant spheres of life.
- 5. Male students have higher indicators of self-trust than female students in all significant spheres of life.
- 6. The revealed trends indicate the need for differentiated psychocorrective work with students to increase trust.
- 7. First, educational and intimate spheres need special attention during corrective work among student youth to strengthen trust. This will become the perspective of our future research.

REFERENCES:

.1. Bilets'ka O. (2020) Doslidzhennya osoblyvostey psykholohichnykh kharakterystyk u

osib yunats'koho viku z riznym rivnem doviry v mizhosobystisnykh stosunkakh [Study of psychological characteristics among a persons of youthful age with different levels of trust in interpersonal relationships]. *Psykholohiya: real'nist' i perspektyvy. Zbirnyk naukovykh prats' RDHU*. № 15. S. 11-17. URL: https://prap.rv.ua/index.php/prap_rv/article/view/179/179

- 2. Brukhovetska O.V. (2023) Psyhologichni osoblyvosti perezhyvannia samotnosti u junackomu vici [Psychological features of lonely experience in youth]. *Visnyk pisliadyplomnoi osvity*. *Bulletin of Postgraduate education*. Is. 25 (54). Social and Behavioral Sciences Series; Management and Administration Series, p. 44-45. URL: http://umo.edu.ua/images/content/nashi vydanya/visnyk PO/25 54 2023/Social/Bulletin 25 54 S ocial and behavioral sciences Brukhovetska.pdf
- 3. Kolomiyets' L.I., Shul'ha H.B. (2023) Osoblyvosti proyavu doviry do sebe u maybutnikh praktychnykh psykholohiv na etapi profesiynoho navchannya v zakladi vyshchoyi osvity [Peculiarities of self-confidence in future practical psychologists at the stage of professional training in a higher education institution]. *Habitus*. Vyp. 55. S. 99-104. URL: http://habitus.od.ua/journals/2023/55-2023/17.pdf
- 4. Nakonechna M. (2022) Psykholohichni osoblyvosti intersub"yektnoyi vzayemodiyi v yunats'komu vitsi [Psychological features of intersubjective interaction in youthful age]. *Naukovyy chasopys NPU imeni M. P. Drahomanova. Seriya 12. Psykholohichni nauky : zb. nauk. prats'* / za nauk. redaktsiyeyu I. S. Bulakh. Kyyiv : Vyd-vo NPU imeni M. P. Drahomanova, 2022. Vyp. 17 (62). C. 60-71. URL: https://sj.udu.edu.ua/index.php/pn/article/view/1177/955
- 5. Pavelkiv R.V (2015) Vikova psuhologiya [Age psychology]. Vyd.2-e, ster. K.: Kondor. p. 291302. URL:http://library.kpi.kharkov.ua/files/new_postupleniya/vikova.pdf]
- 6. Skripkina T. P. Psikhologiya doveriya [Psychology of trust]: Ucheb. Posobiye. M: Akademiya. 2000. 264 p.
- 7. Chayka H. (2023) Vplyv bazovoyi doviry na psykholohichne zdorov″ya lyudyny [The influence of basic trust on human psychological health]. *Naukovi pratsi Mizhrehional'noyi Akademiyi upravlinnya personalom*. *Psykholohiya*. №1(57), S. 46-51. URL: https://doi.org/10.32689/maup.psych.2023.1.8.

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